Status of the Aquatic Plant Maintenance Program in Florida Public Waters

Annual Report Fiscal Year 2005-2006

AUTHORITY

This report was prepared in accordance with §369.22 (7), Florida Statutes, to provide an annual assessment of the control achieved and funding necessary to manage nonindigenous aquatic plants in intercounty waters. The authority of the Department of Environmental Protection (department) as addressed in §369.20 (5), Florida Statutes, extends to the management of nuisance populations of all aquatic plants, both indigenous and nonindigenous, and in all waters accessible to the general public. The aquatic plant management program in Florida's public waters involves complex operational and financial interactions between state, federal, and local governments as well as private sector companies. Therefore, a summary of the entire management program in sovereignty public waters and associated funding contracted or monitored by the department during Fiscal Year 2005-2006 is included in this report.

A detailed account of all facets of aquatic plant management in Florida public waters is provided at the following web site: **http://plants.ifas.ufl.edu/guide**

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Reporting Agency: DEP Bureau of Invasive Plant Management (BIPM)
Program for: FY 2005-2006
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Statutory Requirement: §369.22 (7), F.S.

Florida's aquatic plant management program mission is to reduce negative impacts from invasive non-indigenous plants like water hyacinth, water lettuce, and hydrilla, as well as nuisance native plants, including floating islands that jeopardize navigation, bridges, and flood control structures. Invasive plants infest 96% of the 445 public lakes and rivers inventoried in 2006 that comprise 1.26 million acres of fresh water where fishing alone is valued at over $1.5 billion annually. Once established, eradicating invasive plants is difficult or impossible and very expensive; therefore, continuous maintenance is critical to sustaining navigation, flood control, and recreation while conserving native plant habitat on sovereignty state lands, at the lowest feasible cost.

The floating, non-native water hyacinth and water lettuce are two of the world's fastest growing plants. These invasive plants, that once covered more than 125,000 acres of Florida's public waters, are the BIPM's highest management priority. Floating plants covered 5,580 acres in the 276 waters in which they were detected during 2006; an 8,800-acre reduction from 2005. 99% of Florida's public waters are under maintenance control in regards to invasive floating plants. About $3.6 million were spent controlling nearly 37,100 acres of floating plants in FY 05-06. 81% of the floating plant coverage was in Lake Okeechobee and the St Johns and Kissimmee Rivers and their tributaries. Intensive management efforts are underway to bring these systems under control.

Hydrilla, a submersed invasive species introduced from Southeast Asia in the 1950s, dispersed throughout the state impacting nearly 140,000 acres by the early 1990s. Dense mats form at the water surface blocking navigation, jamming against bridges, starving fish of oxygen, and hampering flood control. Increased control efforts from improved, recurring funds under the Florida Forever Act, along with wave action and increased turbidity from three hurricanes in 2004 reduced the hydrilla standing crop to 20,409 in 2005 - the lowest level since the BIPM began conducting inventories in 1983. However, underground tubers that can sprout and blanket waters within one year, still infest an estimated 91,000 acres. Hydrilla, which has been recorded in as many as 346 public water bodies during the previous 23 years, was detected in 202 waters in 2006. Hydrilla cover increased to about 31,800 acres in 2006; however, hydrilla is considered to be under maintenance control in 96% of Florida's public waters. Approximately $8.5 million were spent managing 17,800 acres of hydrilla in public waters in FY 05-06. These figures represent an increase of about 20% in the acres controlled and 15% in control expenditures over the previous year reflecting the recovery from 2004 hurricane-related disturbances. As water levels dropped and water clarity improved, hydrilla began to recover, requiring increasing statewide maintenance efforts.

Nine additional invasive plants collectively infest 85% of Florida's public waters covering about 18,200 acres. More than $9.1 million were spent managing other plants in FY 05-06, including invasive exotics as well as rooted native plants that interfered with uses and functions of Florida public waters. Floating islands generated from increased water levels and hurricanes in the early 2000s created problems with navigation, flood control, recreation, habitat and even human safety. $8.6 million were spent controlling floating islands in both FY 04-05 and FY 05-06. This intensive management combined with receding water levels in the latter half of 2006 have substantially reduced floating island-related problems as well as the funding required to manage them.

Approximately $29.0 million are needed for FY 07-08 to manage invasive exotic aquatic plants and floating islands; $16 million to sustain control and improve upon hydrilla maintenance strategies; $3.5 million to control floating plants; and $9.5 million to manage other invasive plants including drifting, floating islands in Florida public waters.

Year in Review

- **Invasive non-native plants** pollute 96% of Florida's public lakes and rivers that comprise 1.26 million acres of fresh water where fishing alone has been valued at $1.5 billion annually. (pp. 1, 3)
- The DEP aquatic plant control program mission is to reduce negative impacts from invasive non-indigenous plants in public waters while conserving or enhancing diverse native plant habitat. (pp. 2-29)
- Eradicating established invasive plant populations has proven nearly impossible; therefore, continuous maintenance of invasive aquatic plants is needed to sustain navigation, flood control, and recreation while preserving native plant habitat. (pp. 26-27)
- **Floating water hyacinth and water lettuce,** two of the world's fastest growing plants, covered as much as 125,000 acres of Florida public waters as recently as the 1960s and therefore are the DEP's highest management priorities. (pp. 11, 12, 26, 30)
- Floating plants covered 5,580 acres of public water bodies in 2006 and are under maintenance control in 99% of 276 public waters infested. (p. 37)
- Managers spent about $3.6 million controlling 37,100 acres of floating plants in Florida public lakes and rivers during FY 05-06 to keep them under maintenance control. (pp. 37, 40)
- **Submersed hydrilla**, imported in the 1950s as an aquarium plant, evolved into statewide water and habitat management crises by the mid 1990s infesting about 140,000 acres in 346 water bodies. (pp. 6, 33, 38)
- Improved, recurring funding through the Florida Forever Act allowed for increased hydrilla control. This intensive management and effects of wind and waves generated by hurricanes and strong winter and spring storms reduced hydrilla standing crop to 20,400 acres in 2005 - the lowest hydrilla level recorded since 1982. (pp. 33, 38)
- Hydrilla is under maintenance control in 96% of the 202 public waters that it infested in 2006; however, tubers infest about 91,000 acres and represent the potential for immediate large-scale reinfestation. (pp. 6, 38)
- Managers spent $8.5 million treating 17,800 acres of hydrilla during FY 05-06. (pp. 38, 40)
- Hydrilla is developing an increasing tolerance to the herbicide that was most effective in controlling hydrilla during the past 15 years. Resource managers and researchers agreed that a more aggressive hydrilla control strategy must be applied as hydrilla begins to recover from hurricane-related conditions that have been helping to suppress hydrilla for the previous two years. (pp. 33-35)
- Several thousand acres of **floating islands** and tussocks formed in public waters as lakes rapidly refilled after extreme drought in the early 2000s. Freely drifting tussocks and islands must be controlled to prevent problems with access and navigation, pushing against bridges, or clogging flood control structures. (pp. 21, 35, 36)
- $9.4 million were spent controlling floating islands in Florida public waters during FY 05-06. This control combined with receeding water levels should reduce the need for floating island management in FY 06-07. (pp. 40-41)
- The Florida Exotic Pest Plant Council lists 12 Category I Plants, capable of disrupting aquatic ecosystems and causing economic harm, in Florida public waters. (pp. 3-15)
- Control of Category I plants is contingent upon available funds; for example, approximately 25,000 acres of torpedograss have been controlled on Lake Okeechobee since 2000 with an additional 6,700 acres scheduled to be treated in 2007 at a cost of about $1.35 million. (pp. 33, 41)
- $29.0 million are needed in FY 07-08 to control invasive plants in Florida public lakes and rivers:
- $16.0 million to prevent hydrilla from growing out of maintenance control,
- $ 3.5 million to sustain maintenance control of floating plants,
- $ 9.5 million to control other invasive plants and floating islands and tussocks.

Contents

Background

Florida Fresh Waters

- 1.5 million acres of lakes and rivers
- 7,700 lakes and ponds
- 1,700 rivers and streams
- 455 public* lakes and rivers total 1.26 million acres
- thousands of miles of canals

* sovereignty lands with public boat ramp - note: seven waters were not inventoried in 2006 due to low water.

Recreation

Uses of Florida's Public Waters

- recreation,
- commerce,
- navigation,
- habitat,
- ecotourism,
- potable water,
- flood control,
- irrigation.

Navigation and flood control structure S65 and Highway 60 on the south end of Lake Kissimmee

Navigation

Benefits of Aquatic Plant Management

Habitat

- $1.5 billion in annual revenues to Florida from freshwater fishing and wildlife observation. (1985 U.S. Fish and Wildlife Services Report)
- Orange and Lochloosa Lakes (18,400 acres, Alachua County) generated $10 million annually to local economies. A ten-fold reduction in revenues was identified when water hyacinth and hydrilla covered the water surfaces. (1986 & 1987 University of Florida Studies)
- $13 million value for 4,000-acre Lake Jackson (Leon County). (1996 FSU Economic Report)
- $50 million value for 2,500-acre Lake Tarpon (Pinellas County). More than 700 jobs generating $9 million in wages. (1997 FSU Economic Report).
- $40 million of economic values reported at risk from invasive aquatic weeds, especially hydrilla, for 27,000-acre Lake Istokpoga (Highlands County). (2004 FSU Economic Report)
- $50 million economic value reported at risk from invasive aquatic weeds, especially hydrilla, for the 61,460-acre Kissimmee Chain of Lakes (Osceola County). (2006 FSU Economic Report)

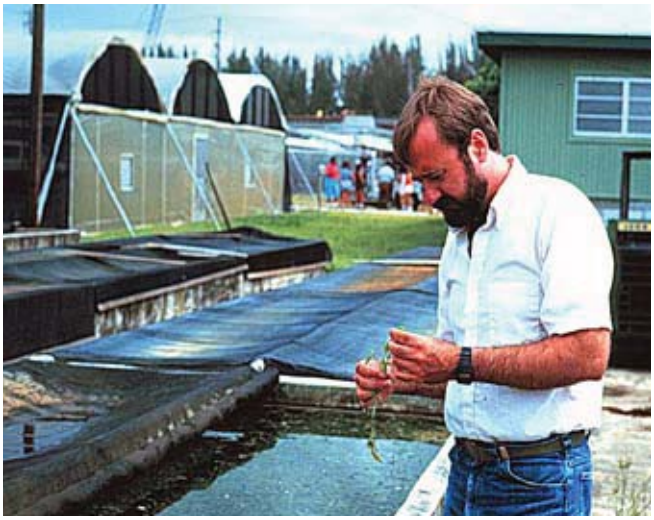
Prevention and Assessment

Intuitively, if invasive plants are not imported into Florida waters, then environmental damage and expensive management programs would not be necessary. If invasive plants are present but detected early, then damage and expenses can be minimized. Florida's multi-agency prevention program and the Bureau of Invasive Plant Management (BIPM) annual inventory of public waters are steps toward reducing impacts caused by invasive aquatic plants.

Prevention

Three agencies cooperate to reduce invasive aquatic plant introductions into Florida:

- the US Department of Homeland Security (DHS) inspects import shipments of aquarium plants,
- the Florida Department of Agriculture and Consumer Services (FDACS) inspects wholesale aquatic plant nurseries, and
- the BIPM inspects retail aquatic plant sales outlets and regulates the collection of plants from, and planting of aquatic plants into, state waters.



Inspecting for prohibited plants

Various federal, state and local governments regulate activities and inform the public about invasive aquatic plant problems via:

- articles,
- books,
- brochures,
- laws, ordinances, codes,
- multi media advertising,
- public speaking engagements,
- reports,
- research publications,
- school curricula, and
- web sites (http://plants.ifas.edu/guide) & (www.dep.state.fl.us/lands/invaspec)

Assessment

Each year, BIPM field staff inventory invasive plants in Florida's 455 public waters that comprise 1.26 million acres of fresh water. Surveys are conducted to:

- detect new invasive plant introductions and alert managers for rapid control,
- establish needs-based management budgets,
- develop management priorities to distribute available funds.
- evaluate impacts from invasive plants and management programs.

Plant inventory in Lake Okeechobee

Invasive Plant Problems

98% of Florida's public waters inventoried in 2006 contained one or more exotic plants. The Florida Exotic Pest Plant Council (FLEPPC) lists 12 of the 24 non-native aquatic plants found in Florida's public waters among the 65 Category I invasive plants reported in Florida. Category I plants invade or disrupt native plant communities.

Category I invasive plants were reported in 96% of the public waters inventoried during 2006 and impacted 114,577 acres (includes estimated 90,829 acres impacted by hydrilla standing crop and tubers).

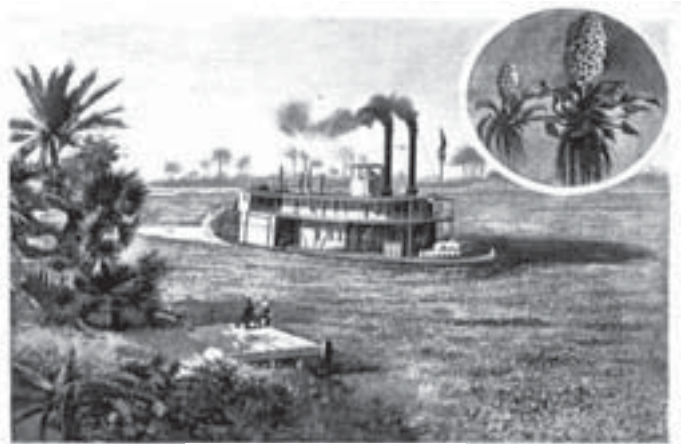
- Category I invasive plants comprised about 35% of all plant acreage inventoried in public waters when all plant species were last inventoried in 2003.

Invasive aquatic plants are characterized by:

- rapid growth,
- multiple reproductive methods,
- wide dispersal and survival,
- broad environmental tolerance,
- resistance to management.

Problems caused by invasive aquatic plants include:

- loss of recreation,
- severe oxygen depletion,
- stunted fish populations, fish kills,
- water flow restrictions, flooding,
- navigation restrictions,
- accelerated sedimentation,
- habitat destruction,
- reduction in diversity,
- reduction in property values.



Water hyacinth has plagued Florida waters since the late 1800s as shown in the 1898 post card (above) of the St Johns River

Hydrilla mat covering the surface of Lake Okeechobee

FLEPPC Category I Aquatic Plants Found in Florida Public Waters

Aquatic nightshade	***Solanum tampisense***
Giant salvinia	***Salvinia molesta***
Hydrilla	***Hydrilla verticillata***
Hygrophila	***Hygrophila polysperma***
Napier grass	***Pennisetum purpureum***
Paragrass	***Urochloa mutica***
Torpedograss	***Panicum repens***
Water hyacinth	***Eichhornia crassipes***
Water lettuce	***Pistia stratiotes***
Water spinach	***Ipomoea aquatica***
W Indian marshgrass	***Hymenachne amplexicaulis***
Wild taro	***Colocasia esculenta***

Aquatic Nightshade

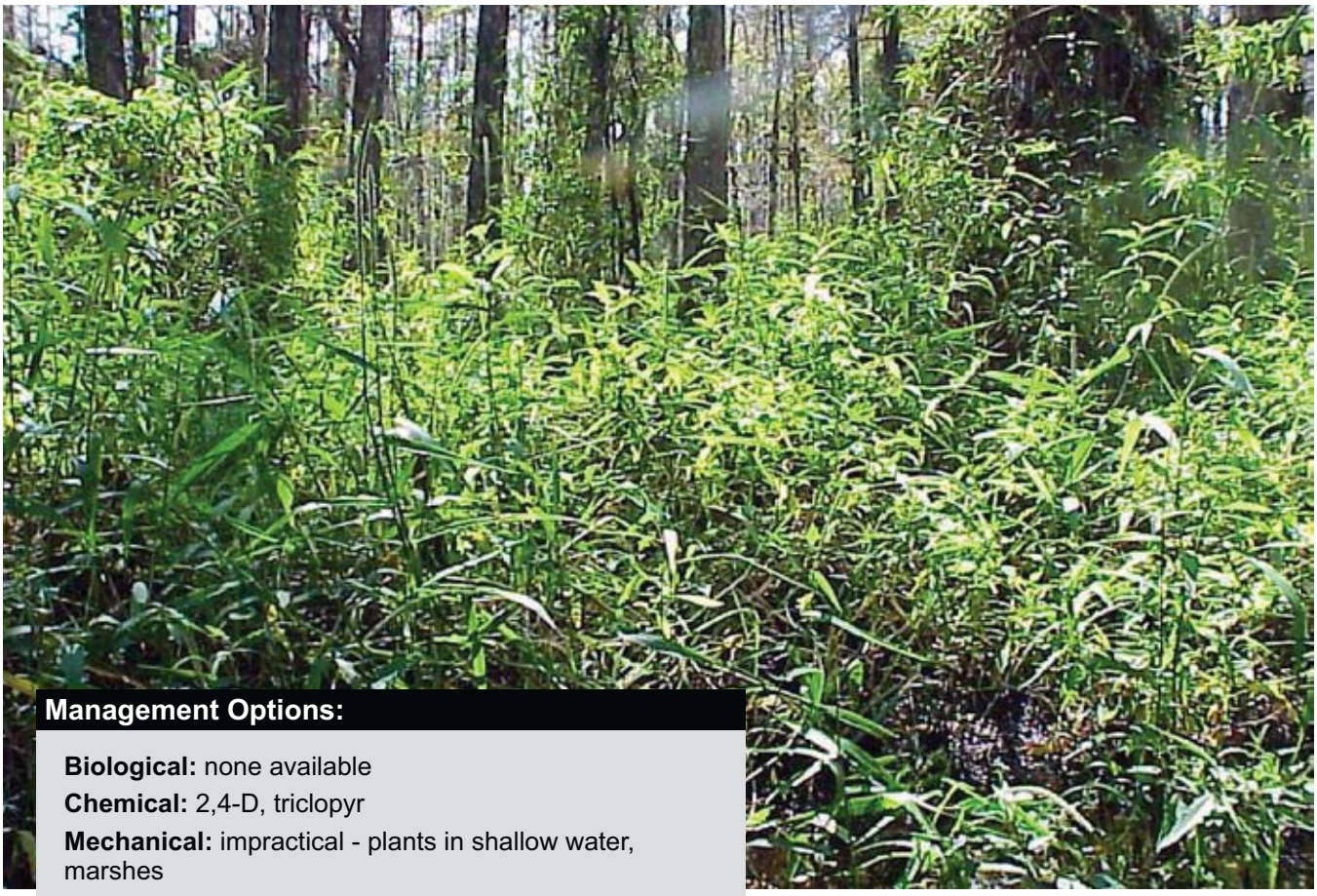
Aquatic nightshade flower and fruit (box), spines on leaf (circle)

Scientific name: *Solanum tampicense*
Origin: Mexico, West Indies
Introduction: 1970s, natural colonization (?)
Aquatic community: Emergent
Habitat: Shorelines, wet soils
Distribution: Central Florida
Management effort: Eradication
2006 public waters / plant acres: 1 / 1

Environmental and Economic Concerns

- Sprawling, prickly shrubs up to 15 feet form dense tangled monocultures.
- Invades disturbed areas and grows over established native vegetation.
- Difficult to selectively remove from intertwined native vegetation.
- Seeds disseminated by birds increasing potential for wide and rapid dispersal.

Aquatic nightshade invading understory of Fisheating Creek



Management Options:

Biological: none available

Chemical: 2,4-D, triclopyr

Mechanical: impractical - plants in shallow water, marshes

Giant Salvinia

Scientific name: *Salvinia molesta*
Origin: South America
Introduction: 1990s, horticulturists
Aquatic community: Floating
Habitat: Water surfaces, quiescent waters
Distribution: Central FL lake, SW FL canals
Management effort: Eradication
2006 public waters / plant acres: 0 / 0

Giant salvinia plants

Environmental and Economic Concerns

- Grows rapidly and reproduces by vegetative fragments.
- Dense infestations block navigation, cover native plants, and clog irrigation pipes.
- Reduces oxygen content in water and causes fish kills.
- Considered as one of the world's worst weeds.

Magnification of hairs on leaf surface

Giant salvinia covering part of the Toledo Bend Reservoir (Texas - Louisiana)

Management Options:

Biological: South American weevil, *Cyrtobagous salviniae* - reports of excellent control from other states

Chemical: diquat, fluridone, glyphosate

Mechanical: not feasible in current infestations

Physical: dewatering

Hydrilla

Dense hydrilla growth at water surface

Scientific name: *Hydrilla verticillata*
Origin: Southeast Asia
Introduction: Ear1y 1950s, aquarium trade
Aquatic community: Submersed, surface mats
Habitat: Inches to 35 feet deep
Distribution: Statewide
Management effort: Maintenance control
2006 public waters / plant acres: 202 / 31,798
(tubers cover estimated 90,800 acres)

Environmental and Economic Concerns

- Grows as much as 4 inches per day in Florida waters.
- Can cover water body surface 1-2 years after introduction.
- 80% of plant mass is in the upper two feet of water column;
  - blocks sunlight and shades out native plants,
  - blocks air exchange and consumes oxygen - fish kills,
  - virtually stops access, navigation, and recreation,
  - breaks loose and jams against bridges and dams.
- Reduces water activity-based incomes and property values.
- Doubles sedimentation rate from scenesing leaves and stems.
- Disperses by fragments, buds, and runners (no seeds).
- Resists control via underground propagules (tubers);
  - millions produced per acre,
  - no effective tuber control method,
  - lie dormant as long as 7 years.

Hydrilla sprouting from tuber

Hydrilla mat covering the surface of Lake Rousseau

Hydrilla jam against bridge

Management Options:

Biological: sterile grass carp, host specific insects (little insect success to date) - testing pathogen in conjunction with herbicides - increasing overseas exploration for additional host-specific insects

Chemical: large scale fluridone; copper, diquat, especially endothall for smaller infestations - testing several new herbicide compounds including bispyribac, flumioxazin, imazamox, penoxsulam

Mechanical: harvest from spring runs, harvest/shred mats against structures

Physical: hand pull / diver dredge new infestations, or in fast flowing water

Hygrophila

Scientific name: *Hygrophila polysperma*
Origin: India, Malaysia
Introduction: Mid 1940s, aquarium trade
Aquatic community: Submersed, emergent
Habitat: Wet soils to water 15 feet deep
Distribution: Central / South Florida, many canals
Management effort: Complaint management
2006 public waters / plant acres: 26 / 203

Stem rooting at leaf nodes

Environmental and Economic Concerns

- Forms dense surface mats especially in quiescent waters;
  - excludes light and oxygen penetration for native plants and animals,
  - hinders navigation and diminishes flood control capacity.
- Fragile stems root at each leaf node allowing rapid dispersal and establishment.
- Expensive and extremely difficult to control.
- Most public water infestations found in rivers or in lakes near river inflow.

Hygrophila clogging a South Florida flood control canal

Management Options:

Biological: extremely high rates of sterile grass carp (in canal systems)

Chemical: frequent applications of various formulations / rates of copper, diquat, endothall, fluridone and 2,4-D provide marginal control

Mechanical: harvest floating mats

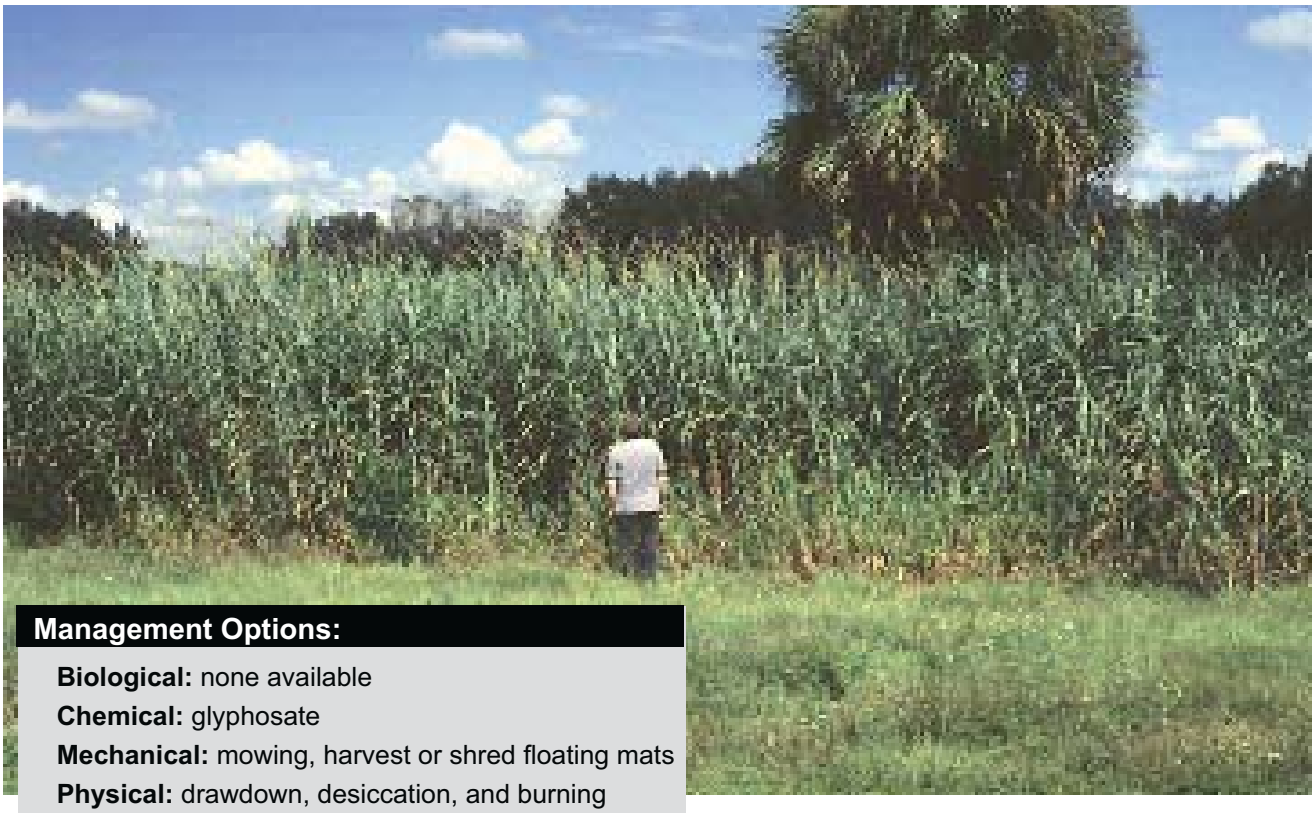
Physical: hand pulling, raking

Napier Grass

Scientific name: *Pennisetum purpureum*
Origin: Old World, Africa
Introduction: Early 1900s, forage grass
Aquatic community: Emergent grass
Habitat: Shorelines, wet to dry soils
Distribution: Central and South Florida
Management effort: Complaint management
2006 public waters / plant acres: 38 / 161

Environmental and Economic Concerns

- Clump-forming grass up to 12 feet tall along shorelines, in wet to dry soils.
- Most often in disturbed areas, especially along canal banks.
- Problems with flood control by blocking access to canals and impeding water flow.
- Deep fibrous root system enables drought resistance, but can be injured by freezes.
- Propogates vegetatively from root crown divisions or rhizome and stem fragments, especially after mechanical control such as tilling.



Management Options:

Biological: none available
Chemical: glyphosate
Mechanical: mowing, harvest or shred floating mats
Physical: drawdown, desiccation, and burning

Paragrass

Scientific name: *Urochloa mutica*
Origin: Africa
Introduction: Late 1800s, forage grass
Aquatic community: Emergent grass
Habitat: Wet soils, shorelines, floating mats
Distribution: Central and South Florida
Management effort: Complaint management
2006 public waters / plant acres: 224 / 1,066

Dense tangle of paragrass

Environmental and Economic Concerns

- Sprawling grass up to 15 feet long that forms dense tufts on shorelines.
- Provides little wildlife value and crowds out native plants.
- Mats can break loose forming floating islands.
- Considered one of the world's worst weeds.

Flower

Single Plant

Paragrass covering Lake Kissimmee shoreline

Management Options:

Biological: none available
Chemical: glyphosate
Mechanical: mowing, harvest or shred floating mats
Physical: drawdown, desiccation, and burning

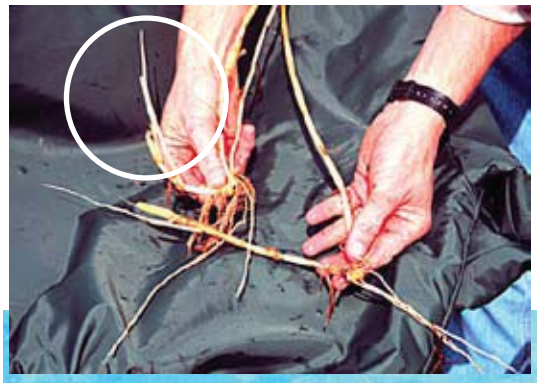
Torpedograss

Scientific name: *Panicum repens*
Origin: Old World
Introduction: Late 1800s, forage grass
Aquatic community: Emergent
Habitat: Dry land to water six feet deep
Distribution: Statewide
Management effort: Complaint management
2006 public waters / plant acres: 361 / 15,396

Torpedograss in Lake Okeechobee

Environmental and Economic Concerns

- Thick mats stop navigation and water movement.
- Displaces native plants in wet soils and shallow waters.
- Resists control via extensive starch-laden rhizomes.
- Most widely dispersed invasive exotic plant in Florida public waters 81%).



Torpedo-like root tip (in circle)

Inspecting torpedograss infestation on Lake Okeechobee

Management Options:

Biological: none available, fungus species under review
Chemical: glyphosate, imazapyr
Mechanical: harvest floating islands
Physical: drawdown and burn prior to treating with herbicides; flood after treatments

Water Hyacinth

Scientific name: *Eichhornia crassipes*
Origin: South America
Introduction: 1880s, horticulturists
Aquatic community: Floating
Habitat: Water surfaces
Distribution: Statewide, especially peninsula
Management effort: Maintenance control
2006 public waters / plant acres: 245 / 1,746

Environmental and Economic Concerns

- Populations double in as little as two weeks.
- Disperses by seeds and stolons.
- Harbors mosquitoes.
- Speeds sedimentation by shedding roots and shoots.
- Dense mats prevent air and light diffusion into water;
  -killing native plants, fish and wildlife, and
  -preventing decomposition of detritus.
- Mats dam against bridges and flood control structures.
- Reduces property values and local tax revenues.

Water hyacinth roots and shoots

Water hyacinth in Fisheating Creek, September 2003

Management Options:

Biological: two weevil species and a moth larvae stress plants reducing plant size, vigor, seed production
Chemical: 2,4-D, diquat, occasionally glyphosate, copper
Mechanical: harvesters or shredders at bridges or flood control structures
Physical: occasional hand picking pioneer populations

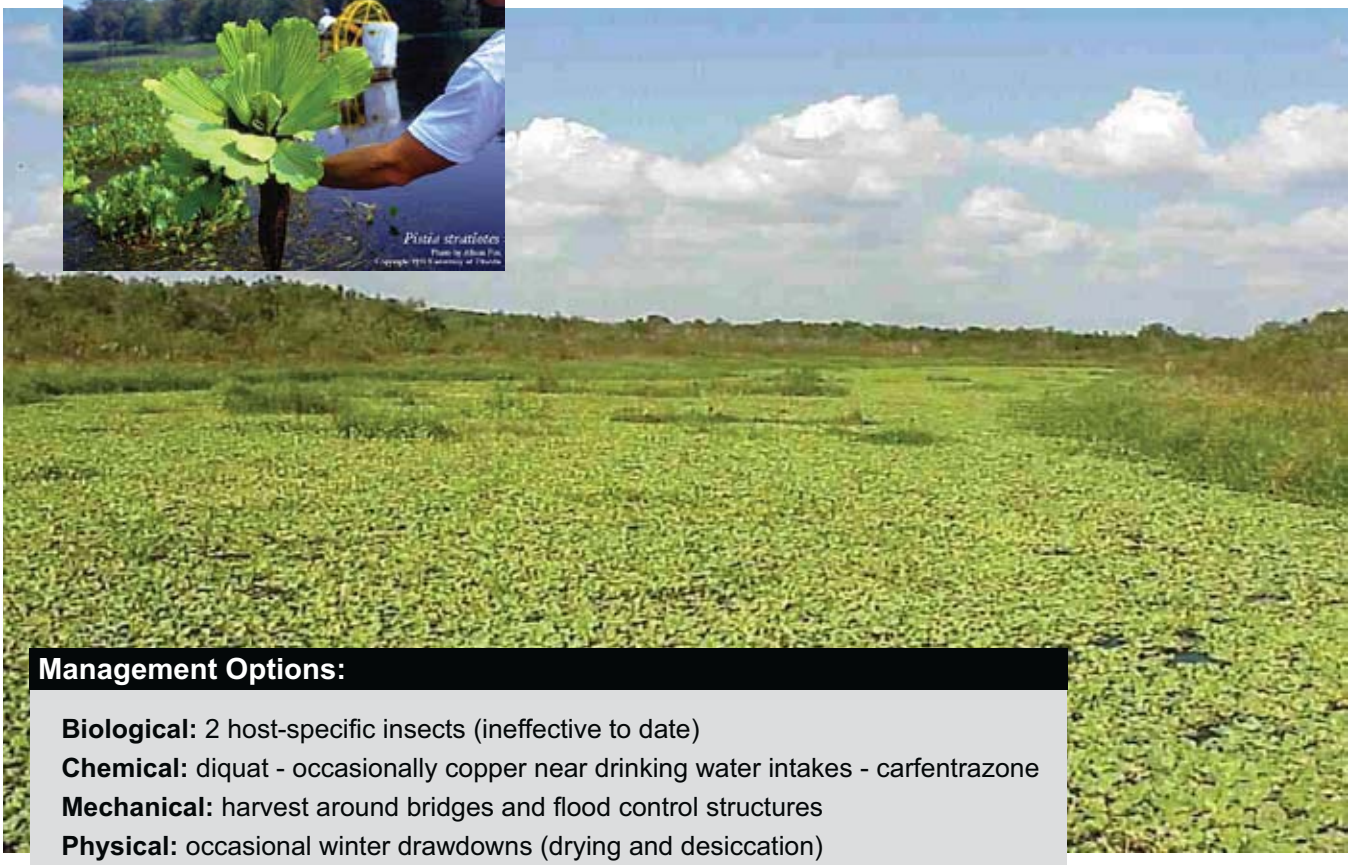
Water Lettuce

Scientific name: *Pistia stratiotes*
Origin: South America
Introduction: Colonial period, ship ballast (?)
Aquatic community: Floating
Habitat: Water surfaces
Distribution: Peninsula, rare in panhandle
Management effort: Maintenance control
2006 public waters / plant acres: 149 / 3,831

Environmental and Economic Concerns

- Growth rate similar to water hyacinth.
- Harbors mosquitoes.
- Mats prevent air and light diffusion into water;
  - killing native plants, fish and wildlife, and
  - preventing decomposition of detritus.
- Speeds sedimentation by shedding roots and shoots.
- Dense mats dam against bridges and reduce water flow at flood control structures.

Below: water lettuce covering Kissimmee River (Pool B)



Management Options:

Biological: 2 host-specific insects (ineffective to date)
Chemical: diquat - occasionally copper near drinking water intakes - carfentrazone
Mechanical: harvest around bridges and flood control structures
Physical: occasional winter drawdowns (drying and desiccation)

Water Spinach

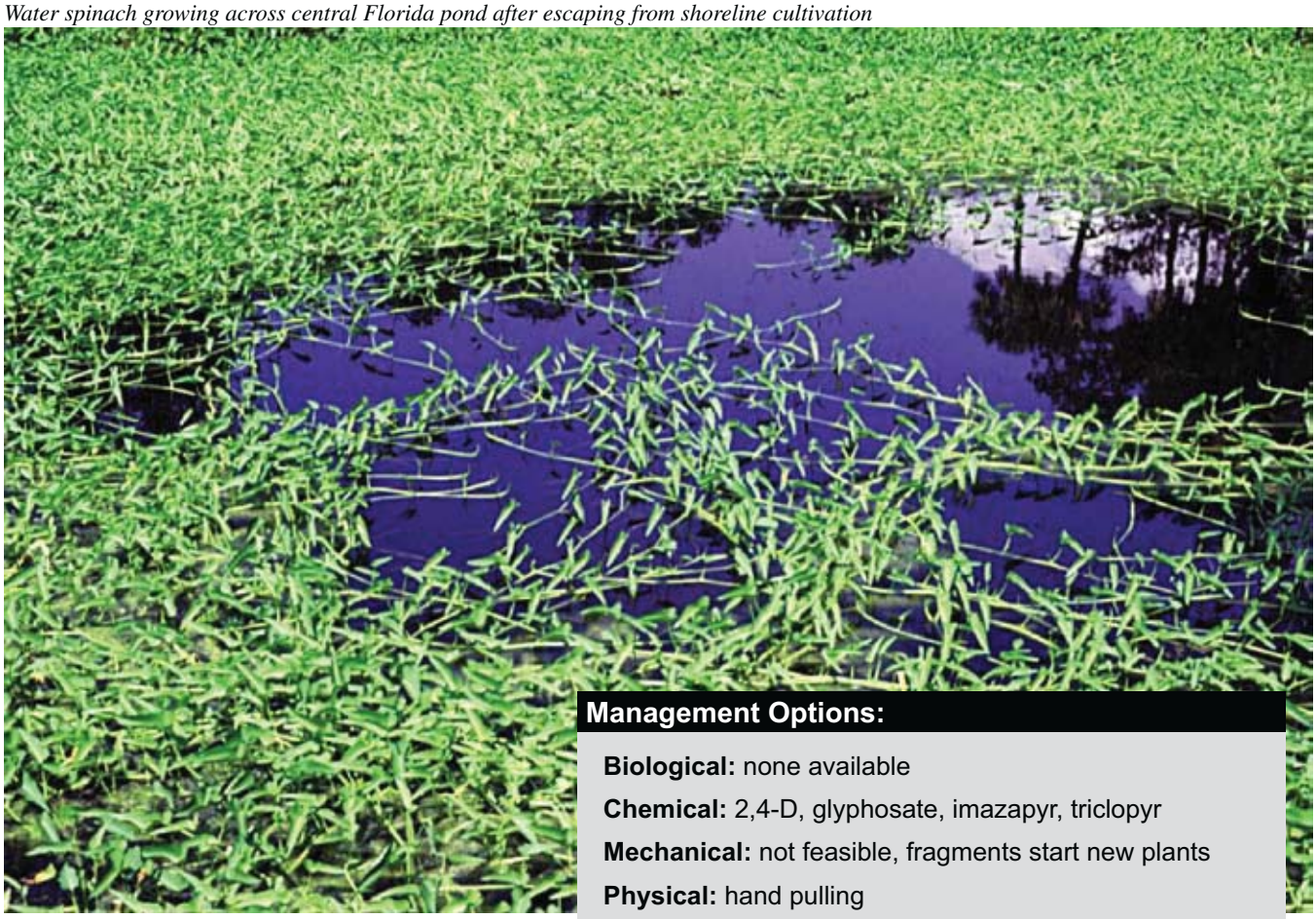
Scientific name: *Ipomoea aquatica*
Origin: China
Introduction: Mid 1900s, vegetable crop
Aquatic community: Emergent
Habitat: Dry land, shorelines, floating mats
Distribution: Isolated sites, statewide
Management effort: Eradication
2006 public waters / plant acres: 0 / 0

Water spinach stem and flower

Environmental and Economic Concerns

- Grows several inches per day.
- Forms dense canopies over emergent plants, floating mats on water surfaces.
- Common weed throughout the tropics, especially in rice fields.
- Potential for rapid dispersal by persons planting as a vegetable crop.

Water spinach growing across central Florida pond after escaping from shoreline cultivation



Management Options:

Biological: none available

Chemical: 2,4-D, glyphosate, imazapyr, triclopyr

Mechanical: not feasible, fragments start new plants

Physical: hand pulling

West Indian Marsh Grass

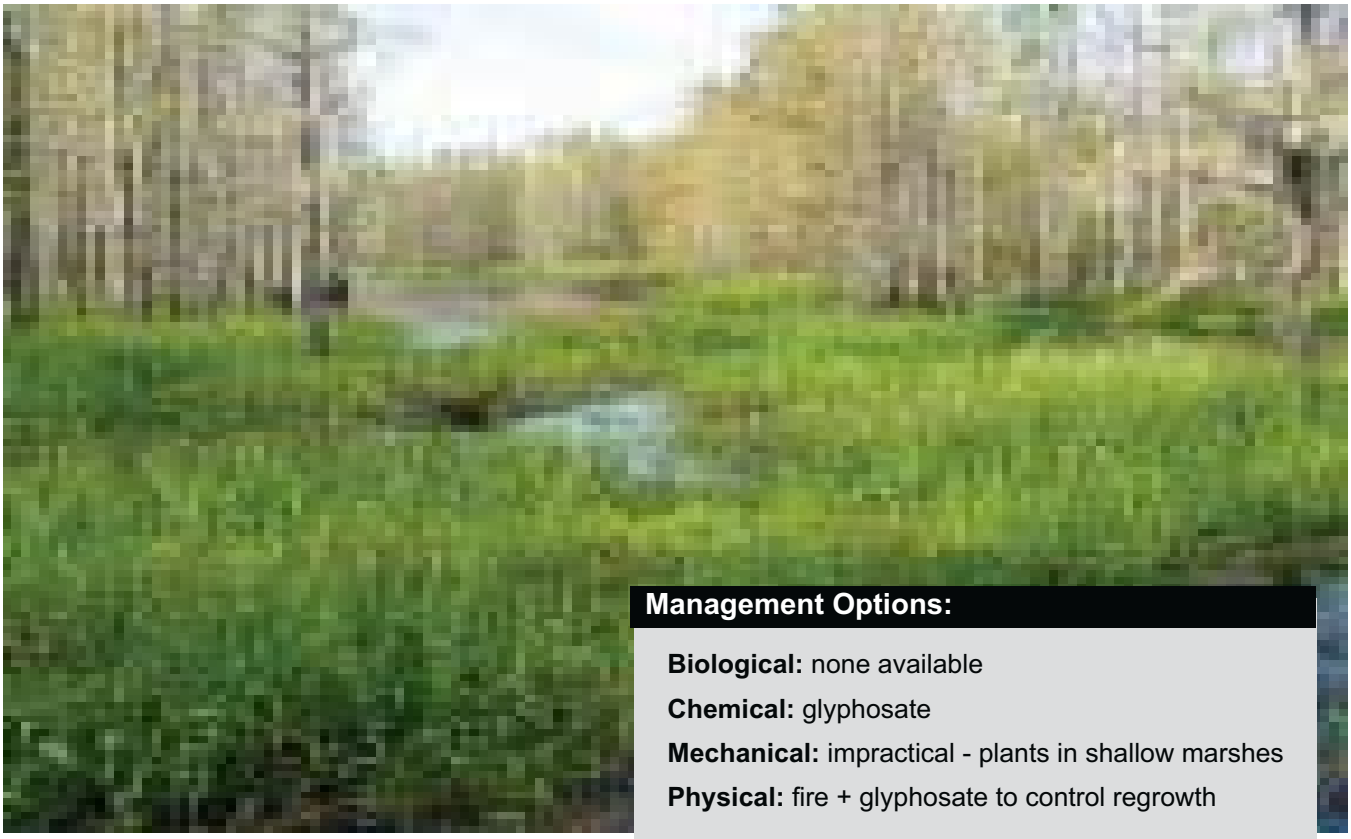
Scientific name: *Hymenachne amplexicaulis*
Origin: Central, South America, West Indies
Introduction: 1970s, natural colonization (?)
Aquatic community: Emergent
Habitat: Wet soils to shallow water
Distribution: South & Southwest Florida
Management effort: Maintenance control
2006 public waters / plant acres: 17 / 297

Flower stalks

Environmental and Economic Concerns

- Forms dense monocultures in marshes and along shorelines.
- Displaces native grasses because of its broader tolerance to wet and dry periods.
- Difficult to control when growing among native grasses because they are susceptible to the same control methods.

West Indian marsh grass blocking Arbuckle Creek



Management Options:

Biological: none available

Chemical: glyphosate

Mechanical: impractical - plants in shallow marshes

Physical: fire + glyphosate to control regrowth

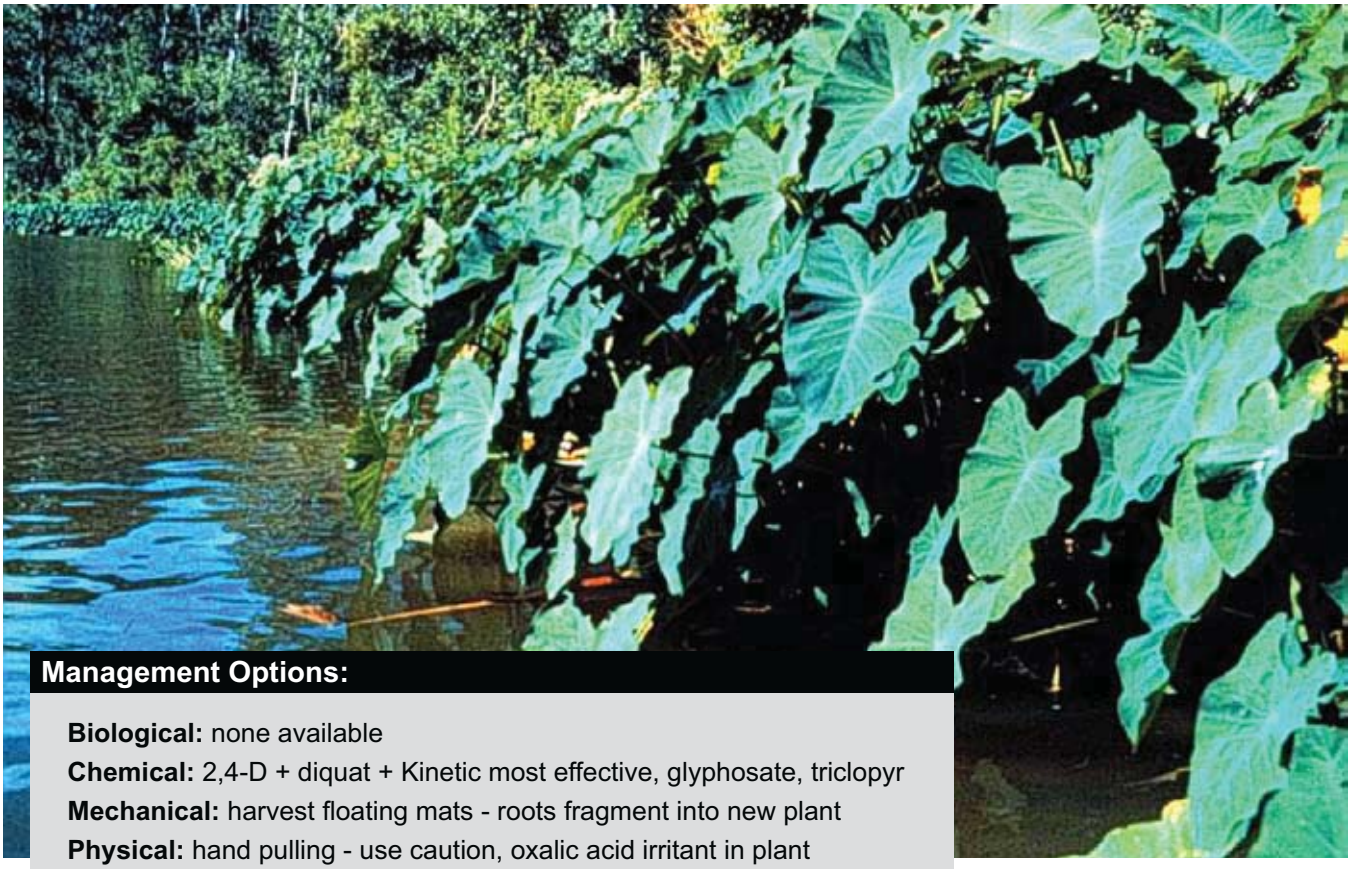
Wild Taro

Scientific name: *Colocasia esculenta*
Origin: India, Southeast Asia
Introduction: Early 1900s, food crop
Aquatic community: Emergent
Habitat: Wet soils, shallow water, floating islands
Distribution: Statewide
Management effort: Eradicate new colonies
2006 public waters / plant acres: 273 / 873

Environmental and Economic Concerns

- Displaces native plants, especially along shaded shorelines and in wetlands.
- Expanded from 35-60% of Florida's public water bodies between 1983-2006.
- Shoreline populations break loose forming floating islands that block access, cover native plant habitat, and root in new areas, spreading the infestation.

Wild taro growing along shoreline



Management Options:

Biological: none available
Chemical: 2,4-D + diquat + Kinetic most effective, glyphosate, triclopyr
Mechanical: harvest floating mats - roots fragment into new plant
Physical: hand pulling - use caution, oxalic acid irritant in plant

Biological Control

General

Biological controls rarely eradicate invasive plants. Their use in Florida's aquatic plant control program is to lessen invasive plant competitive advantages below some ecological or economic threshold. Biological control success is often measured in terms of control achieved by individual agents. However, fewer than one-third of biological controls released world-wide have proven effective when judged under this criterion. The goal of the biological control program is to continue to evaluate and release enough insects or pathogens to, if not eliminate, at least reduce the need for, or amount of, other management options.

The biological control component of the aquatic plant management program has strained under unrealistic expectations. Research and development funding has been minimal, piecemeal, and non-recurring. There is pressure on researchers from managers and policy makers to transfer limited funding to other control options if each evaluated potential control does not immediately reduce target invasive plants. Consequently, there is pressure on researchers to declare management success before sufficient stress or control is sufficient to satisfy management objectives. While the intent is to demonstrate cost-effectiveness of already released biological controls, the effect can be that research funding for additional controls (additional stress on a target invasive plant) is terminated before a solution is found and researchers move on to other problems.

The BIPM and USACE provide funding for review and dispersal of approved controls. The USDA and UF conduct classical biological control research through overseas exploration for insects and pathogens;

- to control established invasive plants,
- with host-specific controls (will not damage non-target plants).

The USDA and FDACS regulate the release of biocontrol agents in Florida.

Fourteen biological controls have been evaluated overseas and released in Florida to control the following invasive aquatic plants:

Plant	# Biocontrols
• alligatorweed	3
• hydrilla	4
• water hyacinth	3
• water lettuce	2
• melaleuca	2

Flea beetle feeding on alligatorweed leaf

Defoliation and stem collapse of alligatorweed mat from biocontrols

Biological Control Efforts in Florida
Three insect species were released in the late 1960s to control invasive alligatorweed. Although alligatorweed is one of the most widely dispersed aquatic plant species in Florida (found in 75% of public waters during 2006), mechanical or herbicide management is rarely necessary in public waters. Insects usually defoliate leaves and collapse stems by early summer (previous page).

Two weevil species and a moth whose larvae feed on the leaves, reduce water hyacinth vigor and seed production, but have not controlled the plant in Florida regardless of the amount of time (10 or more years in some cases without herbicide use, as in the photographs below), or the amount of concomitant mechanical or herbicide control.

Water hyacinth on Fisheating Creek severly stressed by weevils

Insect feeding scars on water hyacinth leaves

Four insects have been released to attack hydrilla leaves (2), stems (1), and tubers (1); however, none have shown signs of controlling or stressing hydrilla in public waters.

Only the sterile Asian grass carp has shown hydrilla control capability, but it is not selective and is difficult to contain in Florida's interconnected surface waters. Lack of selectivity is addressed by stocking the lowest possible rates before hydrilla expands, or in combination with herbicides to keep hydrilla at the lowest level. Removing large numbers of grass carp if overstocked in public water bodies has proven nearly impossible. Triploid grass carp are stocked in 80 of Florida's 455 public water bodies for hydrilla control.

Two South American weevils released to manage water lettuce have dispersed and feed on the plant, but have shown few signs of controlling or stressing water lettuce despite

Chemical Control

Chemicals used to control aquatic plants in Florida public waters fall into two broad categories; herbicides and adjuvants.

Herbicides
Herbicides are applied directly to target invasive plants or are dispersed within the water column to kill plants.

- Advantages:
  - generally selective control,
  - relatively inexpensive,
  - quickly control broad area,
  - eradicate pioneer infestations.

- Disadvantages:
  - temporary,
  - inconsistent public opinion/acceptance,
  - plants may develop tolerance,
  - various water use restrictions,
  - plants decompose insitu,
  - non-target plant impacts.

The US Environmental Protection Agency (USEPA) evaluates herbicides for potential human and environmental impacts, and registers compounds for use in waters if the benefits far exceed identified risks. Evaluations include:

- residue in water, fish, shellfish and crops,
- environmental fate (dispersal in the environment),
- how compounds breakdown and breakdown products,
- routes of entry into test animals,
- short term (acute) toxicity in test animals,
- long term impacts including tumors, birth defects and other abnormalities,
- toxicity to aquatic life such as fish, waterfowl, and invertebrates.

The FDACS registers USEPA-approved herbicides for use in Florida after consulting with state and federal environmental and health agencies through the Pesticide Review Coun-

Research to determine lowest 2,4-D rate for water hyacinth control

The BIPM funds and evaluates research to identify weaknesses in invasive plant life-cycles and to apply herbicides to selectively control invasive plants. Selectivity is attained through understanding physical and biological parameters including:

- developing methods to place herbicides only on target plants,
- determining the lowest herbicide rates that will affect target plants,
- applying the most appropriate herbicide formulation and additives,
- understanding physiology and susceptibility of target and non-target organisms,
- timing control as target plants are most (and non-target plants least) vulnerable.

Approximately 200 herbicide active ingredients are registered in the United States. Registration criteria are much more rigid for aquatic use herbicides vs. their terrestrial use counterparts, consequently only nine herbicide classes are registered with the USEPA and the FDACS for use in Florida waters. Dissapation and efficacy evaluations are underway for four hydrilla control compounds either through the USEPA processes for Experimental Use or Emergency Exemption Permits, or through Special Local Needs Registrations. Compounds registered for use in Florida waters include the following:

Herbicide class	Formulation
carfentrazone	liquid
copper	liquid / granular
diquat	liquid
endothall	liquid / granular
fluridone	liquid / pellet
imazapyr	liquid
glyphosate	liquid
triclopyr	liquid
2,4-D	liquid / granular

Herbicides are classified as contact or systemic, based upon mode of action.

- Contact herbicides kill, relatively quickly, the plant or portion of plant, on which they come into contact. (carfentrazone, copper, diquat, and endothall)
- Systemic herbicides are absorbed into, and translocated within, the plant. (fluridone, imazapyr, glyphosate, triclopyr, and 2,4-D)

Adjuvants

Adjuvants are inert materials added to pesticide formulations to increase the effectiveness of the active ingredient. Adjuvants:

- reduce foaming (clogging),
- reduce drift in the air,
- spread herbicides across leaf surfaces,
- increase herbicide contact by sticking,
- increase herbicide penetration.

Loading fluridone pellets for large-scale hydrilla control

Airboat equipped for liquid and pellet herbicide applications to

Mechanical Control

Mechanical devices have been used since the early 1900s to sheer, shred, slurry, press, pull, lift, and convey aquatic plants from problem areas in Florida public waters.

- Advantages:
  - few water use restrictions,
  - remove vegetation,
  - remove nutrients and organics,
  - no oxygen sag (if plants removed).
- Disadvantages:
  - limited access in shallow water,
  - high operating costs,
  - spread plants via fragments,
  - kill non-target plants and animals,
  - slow (control 2-3 acres / day)
  - repeated harvests select for invasives.

Water hyacinth control on the Caloosahatchee River, 1939

High operational expenses and slow rate of control combined with the rapid growth rate of water hyacinth and hydrilla, and propensity for removing all plant and animal life, limit harvesting these plants to small areas (i.e. around bridges), where other control methods have not been effective (i.e. intertidal waters or fast flowing waters in spring runs), and for tussock or floating island control.

Harvesting hydrilla from fast flowing waters of Wakulla Springs

Water hyacinth spoil pile

In efforts to offset management costs, research has been conducted to find economical uses for harvested materials. However, since aquatic plants are comprised of about 95% water, costs of harvesting, drying, and otherwise preparing aquatic vegetation for commercial products far exceed the costs of deriving similar products from terrestrial vegetation.

Products from aquatic plants include:

- potting soil and mulch,
- animal feed supplements,
- paper,
- furniture, and
- methane gas.

As Florida's four-year drought ended in 2003 and water bodies refilled, thousands of acres of floating islands formed, especially in central Florida public lakes. These islands can consist strictly of floating mats (tussocks) of herbacious aquatic plants, or they can be floating masses of peat and other organic deposits from 2-4 feet thick supporting herbacious and woody plants. In extreme cases floating islands support trees up to 12 inches in diameter and as tall as 50 feet.

Floating islands can inflict the same or greater damage to access, navigation, habitat, bridges, and flood control structures as floating mats of water hyacinth if allowed to drift freely. Herbicides effectively control floating herbacious plant mats, but shredders and harvesters provide the only means of controlling floating islands of thick sediments and large trees.

The photos below and to the right document the nearly 300 acres of floating islands that rose to the surface and drifted back and forth across Todd and Dodd Lakes within the Tsala Apopka lake / marsh system. Islands that had not yet drifted to new locations were shreded while harvesters removed floating islands from boat trails, shorelines, and access points. Material harvested far from shore was stacked on designated spoil piles within the lakes while debris along shorelines was hauled out of the system.

Part of the 300 acres of floating islands drifting in Tsala Apopka

Shredding floating island using vegetation as containment barrier

Final shredding and harvesting floating island containment barrier

Piling harvested material on in-lake disposal site

Removing harvested material from lake

Physical Control

Physical controls include managing aquatic plants by hand, desiccation (drawdowns), flooding, prescribed fire, suction dredging, barriers, and light attenuation. High cost, selectivity concerns, and logistics limit applications to only a few methods and a few sites in Florida public waters each year.

Hand removing aquatic plants, including raking, pulling, and diver dredging is:

- labor intensive,
- used to manage new infestations,
  - when other methods are ineffective (fast flowing springs),
  - when immediate removal is needed (pioneering infestations or removing plants from water pump intakes).

Drawdowns are used to retard or turn back the lake aging process by:

- aerating sediments and accelerating organic decay,
- compacting and stabilizing sediments,
- controlling emergent aquatic plants.

Drawdowns must be conducted frequently if used to control water hyacinth, water lettuce, and hydrilla because:

- drying stimulates seed germination in water hyacinth and lettuce,
- hydrilla tubers are resistant to drying.

Drawdowns are usually reserved for emergent plant control, especially when:

- conducted in winter months to take advantage of drying and freezing, and
- combined with prescribed fire to reduce thatch and other organics, and stimulate regrowth of invasive plants (ie. torpedograss) to facilitate herbicide control.

Partial drawdowns, or water level reductions, are requested to accomodate large-scale hydrilla control in several central Florida reservoirs. Lowering water levels prior to initiating herbicide treatments allows for some storage capacity to buffer against rain events flushing out treated waters. Lowering the volume of water can save millions of dollars in treatment costs and substantially reduce the application of herbicide active ingredient.

Prescribed fire during drawdown, Lake Jackson (Leon County)

Winter drawdown on Rodman Reservoir to kill 1,500 acres of water lettuce by desiccation and freezing

Prescribed flooding (water level increase) is available in a few locations to:

- strand floating plants on upland sites immediately prior to drawdowns,
- retard torpedograss regrowth after drawdown, fire, and herbicide applications, and
- reduce light penetration further stressing hydrilla after herbicide applications.

Two types of material barriers are available that have limited application including:

- benthic barriers that are anchored to substrates to kill plants through;
  - light attenuation and
  - physical disturbance
- silt curtains that are installed to isolate stands of submersed invasive plants
  - from water currents, and
  - to prolong herbicide contact time.

Diver assisted dredge at Wakulla Springs. Above, diver operating suction dredge; right, hydrilla filling catch basket on barge; below, two dredge units in operation to increase efficiency.

Diver assisted dredges are used in other states and occasionally in Florida to:

- control small infestations of submersed invasive plants (including hydrilla tubers) from;
  - fast flowing waters in spring runs and rivers, and
  - boat ramps or other areas where immediate removal of pioneer infestations is needed.

Colored dyes can be applied to attenuate light on a larger scale than with barriers.

- Commercial blue dyes are currently available but are:
  - cost-prohibitive to apply to large public water bodies,
  - difficult to sustain appropriate concentrations in natural, flow-through systems,
  - not selective especially for controlling hydrilla that requires less light to grow than native submersed plants.
- Natural tannins can be concentrated and applied to shade invasive submersed plants, but:
  - impart aesthetically unacceptable dark brown or black color to the water,
  - are nonselective and not available commercially,
  - are difficult to sustain in appropriate concentrations.

Applying endothall herbicide behind silt barrier in Sanlando Springs (above)

Integrated Management

There may be nearly as many definitions of integrated pest management (IPM) as there are invasive species management programs. Most definitions acknowledge several basic components when developing an IPM plan including:

- multiple management options,
- biology and life cycles of invasive species,
- ecosystem sensitivity to invasion by introduced organisms,
- management impacts on ecosystems,
- reducing invasive species impacts below an economic / ecological threshold,
- flexibility to adapt management techniques to changing conditions,
- continuing development of additional management options.

IPM programs must also address the importance of integrating management tools or strategies among the many shared and often competing uses of parcels of land or water bodies. For example; hydrilla control in the Kissimmee Chain of Lakes must incorporate the above issues as well as a thorough understanding of annual flood control regulations, irrigation requirements, recreation, and fish and wildlife habitat, especially endangered snail kite nesting and foraging.

If the dams that regulate water levels within these reservoirs are opened appreciably during herbicide treatments, not only is application cost and control jeopardized, but also additional risks are imposed upon downstream non-target plants. Likewise, the release of herbicide treated waters for irrigation can have negative impacts on commercially important plants, for example in sod, vegetable, and citrus operations. Lowering water levels (volume) prior to herbicide applications reduces herbicide use and costs, but may discharge too much fresh water into downstream estuaries.

IPM Examples

Florida's aquatic plant management program has incorporated IPM strategies since its inception more than 100 years ago when physical, mechanical, and chemical control methods were applied in unison to combat water hyacinth growing in the St. Johns River. Examples of current IPM strategies include:

Chemical + chemical

- 2,4-D is applied to control water hyacinth when it commingles with grasses because 2,4-D has little impact on aquatic grass species. However diquat, that burns (but does not kill) aquatic grasses and bulrush, is used when water hyacinth is mixed with bulrush that is susceptible to 2,4-D (below).

Water hyacinth growing among bulrush

- Fluridone is applied to reduce large-scale hydrilla infestations, while endothall is used to stress fluridone-tolerant hydrilla prior to treatment and to touch up remaining hydrilla left after fluridone applications.

Biological + chemical

- Water hyacinth weevils reduce plant vigor and seed production allowing managers to use much less herbicide to sustain maintenance control.

- Reducing hydrilla standing crop with endothall or fluridone prior to sterile carp release reduces the number of fish required and potential for subsequent carp feeding on non-target plants.

Physical + chemical

- Torpedograss is most readily controlled by dewatering and burning to remove dense thatch, reduce starch, and stimulate growth and susceptibility to imazapyr herbicide.

- Hydrilla control is enhanced by drawing down water levels to reduce the amount of fluridone needed to achieve lethal conentrations, then flooding weeks later to limit light penetration (light stimulates hydrilla growth and breaks down fluridone).

Mechanical + chemical

- Harvesters and shredders remove floating vegetation islands overgrowing navigation channels while regrowth is maintained with glyphosate herbicide.

Prescribed fire preceeding torpedograss control on Lake Okeechobee

Shredding floating islands overgrowing Snake Creek

Physical + mechanical

- Drawdowns incorporating freezes and prescribed fire control emergent aquatic plants, but mats of upland plants that colonize exposed soils must be harvested or shredded before or upon reflooding to prevent them from floating and blocking navigation or structures.

Maintenance Control

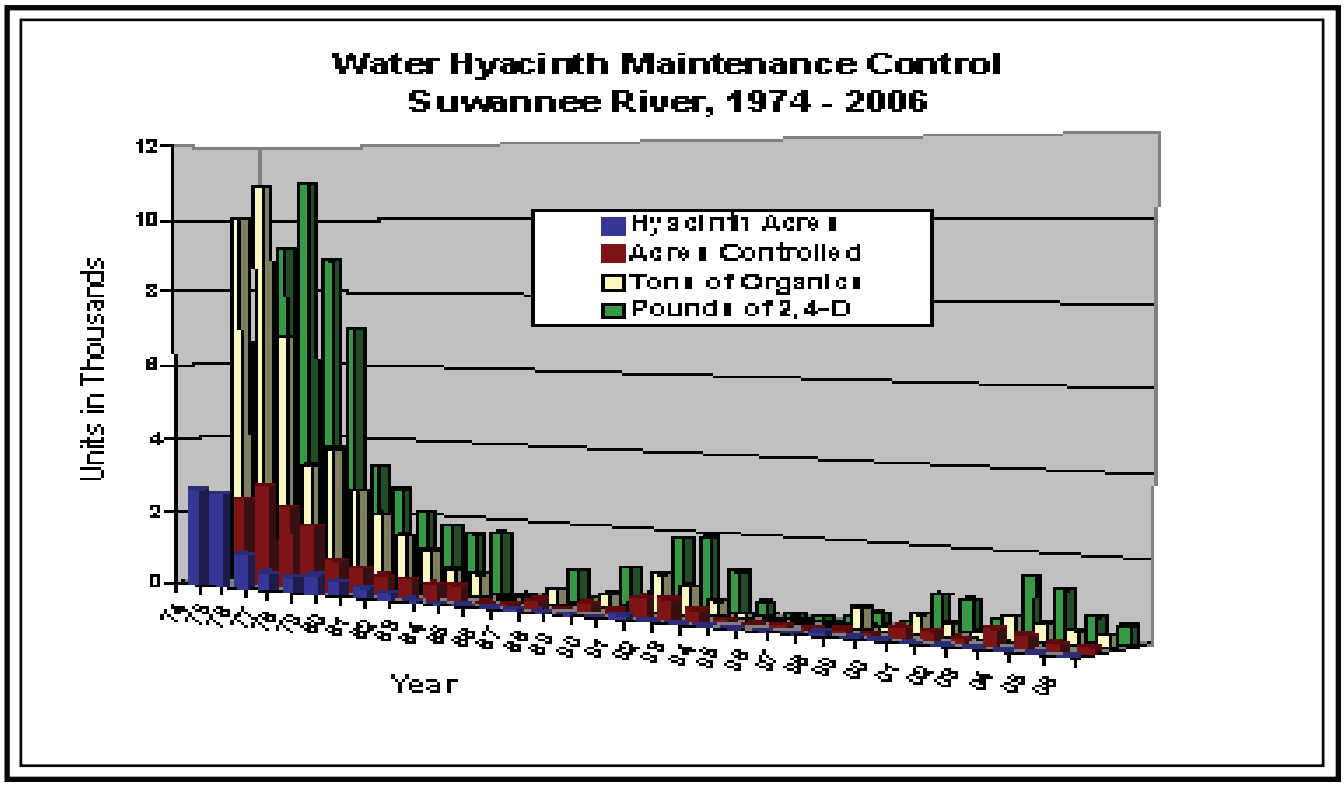
§369.20 (2), Florida Statutes authorizes the DEP to direct the control of noxious aquatic weeds ..."so as to protect human health, safety, and recreation and, to the greatest degree practicable, prevent injury to plant and animal life and property." §369.22 (3), Florida Statutes requires that nonindigenous aquatic plants be managed at the lowest feasible levels ..."for the purpose of achieving more effective control at a lower long-range cost." This concept, known as maintenance control, results in the reduction of:

- sedimentation (filling in),
- native plant damage,
- management costs,
- navigation problems,
- transportation problems,
- flood control problems,
- loss of habitat,
- loss of recreation,
- loss of property values,
- use of herbicides.

The Suwannee River Example

Water hyacinth, one of the world's most invasive weeds, covered more than 2,300 acres of the Suwannee River as recently as the early 1970's. Thousands of tons of sediments were produced by shedding of root and shoot material from live plants and from controlled plants. Hundreds of acres required control using thousands of pounds of herbicide.

Crisis management was replaced by maintenance control in the late 1970s. Under maintenance programs, water hyacinth populations are not allowed to grow out of control. Rather, through frequent inspections and control, this invasive plant is reduced to a minor component of the ecosystem. Since achieving maintenance control in 1985, relatively little management has been necessary, reducing environmental and economic impacts. Native plants have returned to the shores and marshes of the Suwannee River, restoring fish and wildlife habitat.



Management Objectives

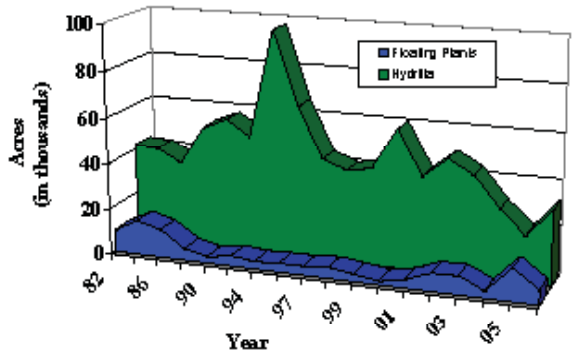
Goals of Florida's invasive aquatic plant management program include:

- Reducing the abundance of invasive non-native aquatic plants polluting Florida public water bodies;
  - emphasis on water hyacinth, water lettuce, and hydrilla,
  - eradicate new infestations of invasive aquatic plants,
  - sustain established invasive plants at the lowest feasible levels, and
  - begin managing established stands of other invasive aquatic plants.
- Sustaining public water body attributes such as navigation, flood control, and recreation while preserving or enhancing diverse native vegetation communities for fish and wildlife habitat.

- Integrating appropriate biological, chemical, mechanical, and physical control techniques into cost-effective and environmentally compatible invasive plant management programs.

- Reviewing current management strategies and assessing and incorporating, where appropriate, new technologies and techniques that enhance invasive exotic aquatic plant management objectives.

Hydrilla and Floating Plant Cover in Florida Public Water Bodies, 1982- 2006



Resource managers, researchers, and other stakeholders met in Orlando in December 2005 for the third in a series of meeting to develop strategies to cope with fluridone resistant hydrilla

Application of penoxsulam herbicide under USEPA Emergency Exemption to treat fluridone resistant hydrilla

Application of imazamox herbicide under USEPA Special Local Needs Registration to test efficacy for hydrilla control

Standardization

The Department of Environmental Protection (then Department of Natural Resources) was designated by the Florida Legislature in 1971 as the lead agency for aquatic plant control because of the agency's broad range of environmental preservation and conservation goals.

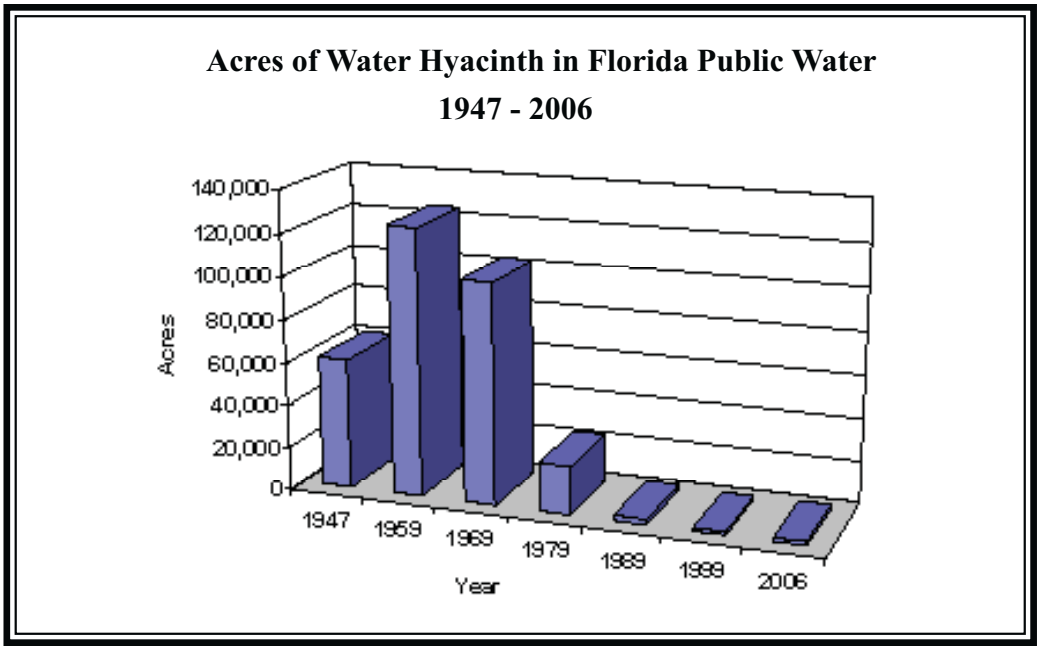
The DEP created the Bureau of Aquatic Plant Research and Control (now Bureau of Invasive Plant Management - BIPM) to coordinate the aquatic plant management activities of more than 200 government agencies and commercial companies in Florida. The centralized approach has proven effective for various reasons:

- establishes a statewide management and resource protection plan,
- ensures statewide priority distribution of available funds,
- reduces administration; one agency distributes funds to areas of greatest need,
- coordinates management operations with water managers and users,
- avoids duplication as well as neglect,
- ensures consistency in policy, goals, administration, and control methods.

The Water Hyacinth Control Example

For decades, water hyacinth was uncontrolled in some waters, or in other instances, managed by several agencies with differing or narrowly focused goals. There was no statewide management directive, funding was inconsistent, and plant populations were out of control as recently as the 1970s.

Water hyacinth has been reduced from an estimated 125,000 acres to a low of about 730 acres reported in public waters during 2000, since the program was centralized under the BIPM. More than 8,300 acres of water hyacinth were inventoried in 2005 as a result hurricanes flushing previously inaccessible plants from adjacent marshes and canals into public lakes and rivers and from reduced control days due to high winds and increased rainfall. Regaining water hyacinth control in all public waters is the highest program priority for 2006.



Authorities / Responsibilities

The Florida Legislature designated the Department of Environmental Protection as the lead agency for coordinating aquatic plant control activities in 1971 (§ 369.20 (2), Florida Statutes). The DEP responded by creating the Bureau of Aquatic Plant Research and Control now the Bureau of Invasive Plant Management (BIPM) to oversee and coordinate these duties.

Funding has never been sufficient for the BIPM to control all aquatic plant problems. Additionally, many aquatic plant problems are not considered to be State responsibilities. Eligibility criteria were established by policy in 1989, and later by rule in 1997 (§ 62C-54.0035 (1), Florida Administrative Code), to identify waters for which the BIPM distributes aquatic plant management funding.

Water bodies must meet the following criteria to receive State aquatic plant control funds:

- the water body must be sovereignty lands,
- the water body must have public boat ramp access,
- a sign must be posted at the ramp stating the water body is open to public use,
- there must be signs directing the public from roadways to the public ramp, and
- the public ramp area must be sufficiently large to launch boats and park vehicles.

Public boat ramp on Lake Toho

Water management, water control (§ 298, Florida Statutes), and other special districts have authorities to raise money and responsibilities to control aquatic plants in canals constructed for flood control and water transport (below). Even sovereignty lakes that do not have public boat ramps benefit small special interest groups, and thus are not eligible for State aquatic plant control funding. Aquatic plant management in these systems is the responsibility of adjacent property owners or some other unit of government.

Residential canals in Cape Coral

The Governor addressed the following common sense criteria to determine which of the DEP's budget issues would be vetoed and which would receive funding. These criteria fit well with policies already established in the BIPM aquatic plant management program:

- statewide benefit vs. a few localities,
- public benefit vs. special interests,
- objective, competitive review process,
- appropriateness of the funding source (if another entity has fiscal responsibility in an area then DEP funds should not be used in that area).

Priorities

Aquatic plant management funding was insufficient to address even high priority hydrilla problems in public water bodies during the 1980s and 1990s. The following priority list was developed (§62C-54.005 (2) (a-g), F.A.C.) to distribute available funds to areas of greatest need and to programs that will achieve the most positive impacts.

Increased funding under the *Florida Forever Act* beginning in FY 01-02 has allowed managers to initiate aquatic plant control programs into Priority Level 6.

Aquatic Plant Management Priorities in Florida Public Waters

1. Floating vegetation
   - water hyacinth and water lettuce
   - can impact all areas of public waters
   - also floating plants in canals that could contaminate public lakes and rivers

2. New hydrilla infestations
   - if controlled prior to establishing tubers, then low-cost eradication is possible
   - usually at boat ramps
   - also hydrilla in canals that could contaminate public lakes and rivers

3. Boat ramps, navigation trails, and flood control structures
   - invasive exotic and native plants, including floating islands are equally problematic if blocking these areas or structures
   - includes floating tussocks / islands

4. Create open areas in extensive hydrilla mats
   - recreation
   - preserve fisheries
   - flood control and navigation

5. Large-scale hydrilla management
   - control projects of 500 - 25,000 acres

6. Other plants
   - remaining FLEPPC Category I invasive aquatic plant species
   - more than 100 other exotic and native aquatic plant species

7. Residential canals or boat trails servicing private homes or clubs except for:
   - water hyacinth or water lettuce
   - hydrilla, if a connecting public water has little to no hydrilla

Establishing management priorities

Hydrilla Control Considerations

While management of floating plants, water hyacinth and water lettuce, is the BIPM's highest priority, hydrilla control represents the greatest management expense, and large-scale hydrilla control in multiple use public waters represents the greatest management challenge. Below are some of the variables that must be considered when developing large-scale hydrilla control plans.

Water uses

- navigation (commercial/recreational)
- flood control
- potable water, irrigation, livestock
- downstream water uses and needs
- recreation potential
  - boating
  - fishing, hunting
  - water sports (swimming, skiing, etc.)
  - wildlife observation
- wildlife management
  - endangered species concerns
  - fishery and waterfowl management
  - habitat - including listed plant species
  - nesting sites, foraging habitat
  - revegetation projects
  - other wildlife presence

Control feasibility

- potential for control
  - available methods
  - environmental conditions
  - water depth and volume
  - water movement (waves, flow)
  - chemistry (oxygen, nutrients, pH)
  - sediment type (clay, sand, organic)
  - sediment composition and depth
  - water temperature
  - plant growth stage (hydrilla and non-target species)
  - water clarity (tannin, turbidity, algal content)
- history of control success in that water or in waters with similar conditions
- potential for native/invasive plant regrowth

Other considerations

- cost
- logistics
  - contractor and equipment availibility
- local government and public support level (verbal, financial, in-kind)
- alternative water body proximity
- values associated with the water body at risk

Hydrilla covering north end of Lake Toho, 1997

After hydrilla control on north end of Lake Toho, 1998

Management Timetable

Plant management programs are developed each year for public waterbodies. Government contractors and BIPM and FWC field biologists draft requests that are reviewed by local, state, and federal agency personnel and other stakeholders that have authorities or have expressed interest in invasive and nuisance plant management in public waters. Reviewers then meet to establish management plans, priorities, and budgets for the ensuing year. Identified stakeholders are again notified 1-2 weeks prior to project implementation. As new problems arise or if anticipated problems do not materialize, then funds are reallocated among contractors to accomodate these changes. In this way, the program maintains statewide standards while adapting quickly to local and regional needs.

Refining the floating plant control plan for the Kissimmee River

Administrative and Management Timetable for Aquatic Plant Control

- **January 1 - February 1**
  Managers and contractors meet to develop large-scale hydrilla control projects.

- **February 1 – March 15**
  Contractors and BIPM and FWC biologists develop plant management requests and budgets for the ensuing fiscal year for public waters.

- **March 15 – April 15**
  Distribute management requests to reviewing agencies with jurisdictional authorities. Most large-scale hydrilla control projects are initiated.

- **April 15 – May 1**
  Compile written comments from reviewing agencies.

- **May 1-15**
  Consider comments in developing management workplans for each water body and set priorities within current budget during meetings with agency staffs and other interested persons.

- **May 15 – June 30**
  Incorporate approved workplans into government and private contracts and task assignments.

- **July 1 – June 30**
  Manage aquatic plants pursuant to contracts - revise and reallocate funds as conditions change.

- **April 1 – November 15**
  Inventory aquatic plants in public waters to monitor control impact and revise management priorities.

- **November 15 - December 15**
  Compile and verify data from plant inventories and management invoices.

- **December 15 – 31**
  Prepare annual report and ensuing fiscal year budget requests after analyzing plant inventory and management information.

Challenges

Aquatic plant management is a complex discipline that blends predictable sciences of chemistry and hydrology with the highly variable parameters of biology and meteorology, for application in venues with boundaries defined by human values and economics.

Successful aquatic plant managers:

- apply the most appropriate control methods,
- conserve, restore, and enhance natural processes and/or human uses of public water bodies,
- assess priorities and adapt management strategies based on ever-changing;
  - biological conditions,
  - funding availability,
  - public perceptions/demands,
  - control technologies,
  - contractor availability, and
  - weather conditions.

The greatest challenges facing Florida aquati plant managers heading into 2007 include:

- sufficient, recurring funding,
- variable tolerances of hydrilla clones to fluridone herbicide,
- cost effective hydrilla control in multi-use central Florida reservoirs,
- managing floating islands of plants and sediments that form as water levels return to pre-drought conditions.

trol. Little was done during previous decades to suppress other plants like wild taro invading marshes connected to Florida's public waters (Fig. 2). Consequently, these plants now pres-

Fig. 1

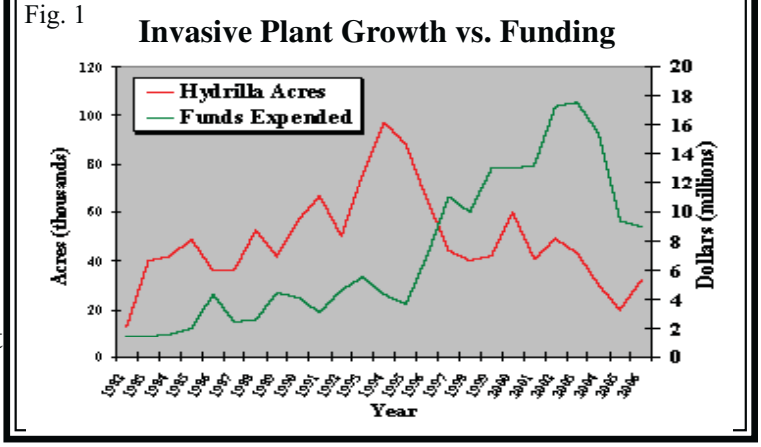
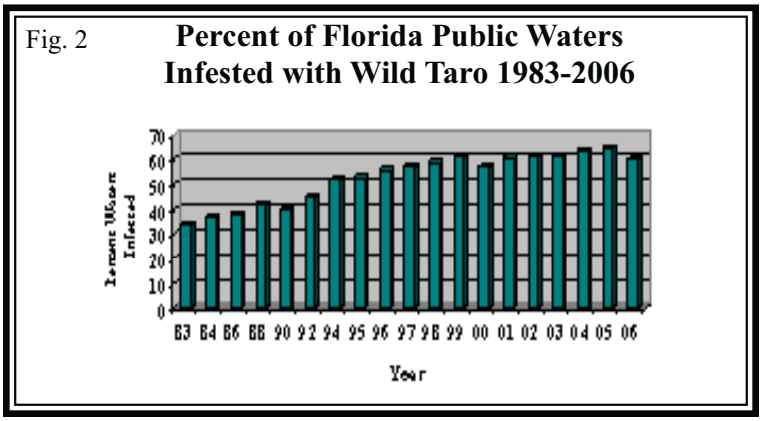


Fig. 2



ent significant challenges. Additional funding for invasive plant control became available through the *Florida Forever Act* in FY 01-02. Since then, management programs have been initiated for other invasive aquatic plant species.

Sufficient, recurring funding

With sufficient funding, hydrilla can be reduced to, and sustained at, a lower level (Fig. 1). Conversely, when funds are insufficient, hydrilla expands within infested waters and is transported to additional waters. When hydrilla expands, a higher level of funding is required to regain and maintain control. This principle applies to managing most invasive species. Because of their high management priorities, floating plants and most (but not all) hydrilla populations have been contained. Of the 202 hydrilla populations recorded in 2006, seven were considered not under maintenance con-

Hydrilla tolerance to fluridone herbicide

Since its registration by the USEPA and FDACS for use in Florida waters in 1986, fluridone has provided the chief means for large-scale hydrilla control. It is slow acting and relatively selective at

low doses so hydrilla can be weeded out of native plant populations without appreciable oxygen reduction prevalent when using fast-acting contact-type herbicides on a large scale.

Scientists from several research facilities reported in 2000 that hydrilla appeared to be developing a tolerance to fluridone in some Florida waters. This confirmed field observations of declining hydrilla control even after following procedures from previously successful fluridone treatments. This tolerance surprised managers since hydrilla reproduces asexually in Florida (only female plants are present) leaving no avenue for gene recombination. Further, fluridone attacks only one gene location in hydrilla leaving a remote chance for mutations. This is also the first case of a plant developing a resistance to a bleaching-type herbicide.

Geneticists calculate that as many as 17 different hydrilla clones are possible. At least six have been identified in Florida with tolerances ranging from 2-38ppb. When fluridone was first applied in Florida, it is estimated that hydrilla susceptibility renged from 2-8ppb. It is thought that mutations occurr randomly among the billions of growing points in a hydrilla-infested water. Repeated low dose fluridone treatments controlled the highly susceptible clones, leaving the more tolerant plants.

Increasing fluridone resistance can be compensated by increasing herbicide rates, but this translates into escalating management costs, reduced selectivity for surrounding native plants, and in extreme cases, failure to control hydrilla if the elevated herbicide concentration cannot be maintained for appropriately 70-90 days. In order to adapt to these evolving conditions, three workshops and summits were held during 2004 and 2005 to review hydrilla management strategies and identify additional research needs. There was concurrence among managers and researchers at the meetings that, pending developmant of new large-scale hydrilla management tools, the DEP should employ an aggressive management posture toward hydrilla to prevent small hydrilla populations from becomming large, unmanagable problems.

Hydrilla management in flood control reservoirs

There are no better examples of the many shared uses of Florida public waters than in the Kissimmee Chain of Lakes (Lakes Toho, Cypress, Hatchineha, and Kissimmee) and Lake Istokpoga. Likewise there are no better examples of the impacts of hydrilla maintenance on the uses of water bodies and, visa versa, the impacts of the uses of water bodies on the ability to conduct hydrilla maintenance. Water levels and discharge flows for each of these reservoirs are manipulated by water control structures with prescribed schedules designed and closely adhered to by the USACE and SFWMD. These five lakes contain 57% of the state's hydrilla tuber bank and as much as half of the BIPM's annual budget has been spent managing hydrilla in the Kissimmee Chain and Lake Istokpoga.

The waters of the Kissimmee Chain and Lake Istokpoga are used for flood control, navigation, and irrigation. They are world renowned for recreational fishing; provide habitat for waterfowl and opportunities for hunting, and are home to rare and endangered species like eagles, storks, cranes, and Everglades Kites. The five lakes, with a collective surface area of 92,200 acres, have supported hydrilla standing crops totalling nearly 70,000 acres. Successful management is imperative or hydrilla will fill the water columns of these lakes bringing recreation and navigation to a standstill, reducing the capacity for irrigation water supply and flood protection, reducing oxygen content that could lead to massive fish kills, and accelerating the filling in of these already shallow waters. Ironically, annual hydrilla management costs are escalated and success jeopardized by the very uses that hydrilla control is conducted to preserve.

The most opportune time to control hydrilla is in late winter through early spring. Hydrilla is actively growing and most native plants are dormant allowing for selective control using herbicides. Once hydrilla reaches the surface in the summer, growth slows requiring more herbicide and longer exposure time. Water temperatures are cool and

hold more oxygen than in the summer allowing for more of a buffer during hydrilla decomposition. Rainfall chances and quantities are generally lower in the winter and spring than during the summer tropical storm season that would flush out herbicide-treated waters. Sunlight that breaks down fluridone herbicide is less intense in the winter allowing for longer exposure time to hydrilla. Finally, controlling hydrilla in the winter and spring prevents hydrilla from forming mats at the surface that prevent or hamper the uses of the infested waters later in the summer.

Several important functions within these waters combine to increase hydrilla control costs and lessen chances for management success. Lakes are held at their highest levels during the winter to store water for irrigation. Increased water levels in Lake Toho can triple the amount of herbicide needed as well as management costs to achieve the same level of control if the waters were at extreme low pool stage. For example, the cost to treat 15,000 acres of hydrilla with fluridone herbicide at 49ft NGVD was about $2.5 million in 2004; about $9 million at the full pool winter stage of 55ft NGVD.

Fish spawning conditions are optimal at 55ft NGVD by allowing bedding and fry survival in the expanded littoral vegetation zone. Winter is the peak tourist use season and lower water levels hamper access and navigation. Additionally, there is concern that lowering lake levels too quickly may add too much fresh water in downstream estuaries. Enough water must be retained in the reservoirs to provide continuous flows to restored downstream marshes; however, these discharges siphon off thousands of dollars of fluridone-treated water each day of the 60-90 day treatment regimes. Thousands of pounds of herbicide must be added to compensate for the loss of active ingredient. If the herbicide concentration falls below the threshold hydrilla control level, then success of the entire treatment is jeopardized.

Plant, water, and fish and wildlife managers attended a series of meetings during 2004 and 2005 to discuss the impacts of increasing difficulties controlling hydrilla on the ability to supply water and provide flood control in the large central Florida reservoirs. These were steps toward amending current water schedules and developing windows of opportunity that accommodate the uses within the Kissimmee Chain and Lake Istokpoga as well as the need for water level fluctuations for hydrilla control and periodic drawdowns for habitat enhancement.

Floating Islands (Tussocks)

From 1998-2002, most of Florida parched under extreme drought conditions. Water levels receded by five feet or more in lakes across Florida exposing thousands of acres of lake bottom to colonization by terrestrial vegetation. Transitional plants like cattail encroached into contours previously too deep to allow their growth. As many as 46 public waters were inaccessible during the peak of the drought as boat ramps and access channels completely dried.

Drenching rains returned and water levels recovered quickly in late 2002 and early 2003 to pre-drought conditions, cresting some lakes at record levels. Lake managers are familiar with floating islands or tussocks forming after periods of drying and re-flooding. Funds are often held in reserve to manage tussocks and floating islands that may form after extreme drawdowns. However, the extent of the most recent drought (numbers of waters, area of exposed lake bottom, and duration

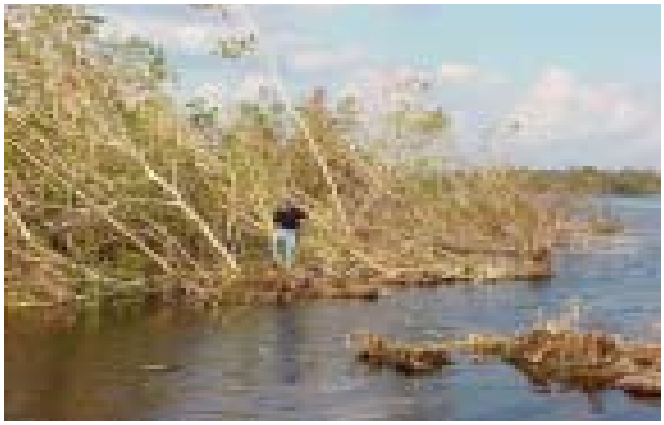
Most tussocks appear to be formed in one of three ways. In some cases floating mats of plants like frog's bit, pennywort, and smartweed grow from shore across the surface of shallow waters. These vegetative mats break loose in wind or waves and float freely in the water body. In other cases, emergent plants like cattail and pickerelweed grow in soft, muddy substrates. When water levels increase rapidly the plant's spongy, buoyant tissues pull them loose from the sediments. Small patches are broken up by wave action; however, some can cover hundreds of acres; for example cattail tussocks on Lakes Apopka and Hancock, and pickerel weed and frog's bit tussocks on Orange Lake, and must be controlled to keep them from drifting into the outfall canals and flood control structures. Vegetative tussocks as in these two examples are relatively easy and inexpensive to control with herbicides, usually at a cost of less than $200 per acre.

Floating islands form when terrestrial or emergent aquatic plants anchor tightly in exposed or shallow sediments. When water levels increase, rather than pulling from the sediments, the plants pull the top several inches or few feet of organic sediments with them. In some cases, the sediments themselves are buoyant (for example, dried peat deposits) and float to the surface along with overlying aquatic and terrestrial plants. Herbicides alone cannot control these floating islands. Killing the vegetation does not sink the sediments and plants simply re-colonize the floating mat of peat or muck. These thick sediment islands must be shredded or harvested, although treating with herbicides and burning vegetation first if possible facilitates their control. Costs can range from about $3,500/acre for shredding to more than $10,000 per acre for harvesting. Costs increase when the islands need to be hauled from the water body, loaded into trucks, and transported to dump sites. Trees need to be seperated from the sediments and chipped or burned and the sediments spread at the disposal sites.

Three major hurricanes crossed central Florida during 2004 with substantial floating tussock and island implications. In some cases, for example, Orange Lake, high water and winds deposited many of the drifting pickerelweed tussocks deep into marshes and uplands where they will no longer pose threats to access or navigation. In others, for example, Lakes Pierce and Marion, increased water levels and hurricane winds broke loose floating islands of peat 3-4 feet thick supporting trees more than 50 feet tall. These drifting juggernauts can break apart boat docks and boat houses, push against bridges, and clog flood control structures.

Prior to 2002, oneor two shredders and several harvesters worked occasionally in Florida public waters, primarily to keep established navigation channels open. In FY 04-05, six shredders and more than a dozen harvesters were employed in floating island management - some working round-the-clock to preserve or restrore flood control, navigation, recreation, and fish and wildlife habitat.

Barrier constructed across Lake Hancock outfall canal to prevent floating islands from clogging flood control structure



Part of nearly 100 acres of floating islands on Lake Pierce generated by Hurricane Charley

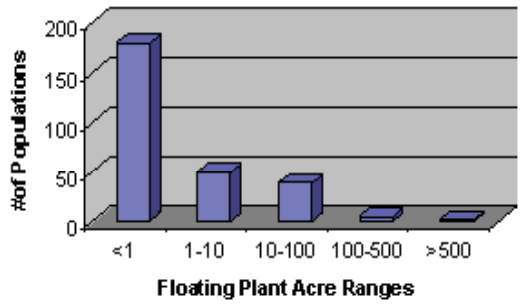
Operations – Floating Plants

Water hyacinth and water lettuce are two of the fastest growing plants in the world. This combined with their floating nature and ability to coalesce almost overnight into large mats that interfere with human and environmental uses and functions in public waters have earned these floating plants the highest management priority in Florida's aquatic plant control program.

Record low floating plant levels were achieved during the drought years of the late 1990s. Alternating drying and re-flooding stimulates water hyacinth and water lettuce seed germination, and as waters refilled during the early 2000s, floating plant populations soared from new growth and from plants that were flushed out of marshes that were inaccessible during the drought.

No sooner was this growth reduced than another surge in the floating plant population occurred, associated with four major hurricanes during 2004. Management crews pulled double duty controlling floating plants as well as responding to hurricane clean-up. Private sector crews teamed up with government contractors in 2005 and 2006 and reduced floating plants to near pre-hurricane levels. While floating plant acreage nearly quadrupled in 2005, about 65% of this growth occurred in just two systems; the St. Johns River and Lake Okeechobee. Contracts among federal, state, and local governments and several private companies were established to reduce floating plants during the winter of 2005-2006 to regain maintenance control prior to the prime growing season of 2006.

2006 Floating Plant Population Ranges (in acres) in Florida's Public Waters



About 37,071 acres of floating plants were treated in public waters in FY 05-06:

- approximately 60% water hyacinth and 40% water lettuce
- 8,520 more acres than in FY 04-05
- 12,300 more acres than the previous five-year average

Managers spent about $3.5 million controlling floating plants during FY 05-06:

- $0.8 million more than FY 04-05
- $0.8 million more than the previous five-year average
- about 34% spent by the USACE on Lake Okeechobee and the St Johns River and its tributaries

2006 inventories recorded 5,580 acres of floating plants in Florida public waters - 8,820 fewer acres than 2005:

- found in 276 (61%) of public waters inventoried
- floating plants are under maintenance control in 99% of Florida's waters
- 1,746 acres of water hyacinth were reported in 245 water bodies
  - 99% under maintenance control
  - 225 water bodies contained 10 or less acres of water hyacinth
- 3,831 acres of water lettuce were reported in 149 water bodies
  - 98% under maintenance control
  - 121 water bodies contained 10 or less acres of water lettuce

Operations – Hydrilla

Florida's hydrilla control program focuses on eradicating or containing pioneer colonies before they become large-scale maintenance projects, and reducing established populations to sustain the various uses of public waters. Hydrilla has infested as many as 346 public lakes and rivers. That number was reduced to 202 in 2006; 69% of which covered 10 acres or less. Most of the hydrilla control budget is spent on 20-25 waters; among them are some of the largest and most important in the state.

Hydrilla first appeared in the large lakes and reservoirs of central Florida during the late 1970s, reaching peak abundance in the middle 1990s. Increasing resistance to the lone large-scale hydrilla management tool available, fluridone herbicide, resulted in escalating management costs although the overall hydrilla population remained fairly stable from year to year.

Large-scale fluridone applications in the spring and summer of 2004 were moderately successful in controlling and suppressing hydrilla in central Florida. However, three major hurricanes passed within a few 10s of miles of most of these waters during August and September with wind and waves ripping much of the remaining hydrilla standing crop up and depositing it on the surrounding uplands. Tannic and turbid water, and in some cases algae blooms, limited light penetration, suppressing hydrilla re-growth through 2005. The result was the lowest statewide hydrilla standing crop (20,400 acres) recorded since the BIPM began conducting annual inventories in 1982, and the lowest overall control effort needed since the late 1990s to achieve and sustain this low standing crop.

About 17,800 acres of hydrilla were treated in public water bodies during FY 05-06:

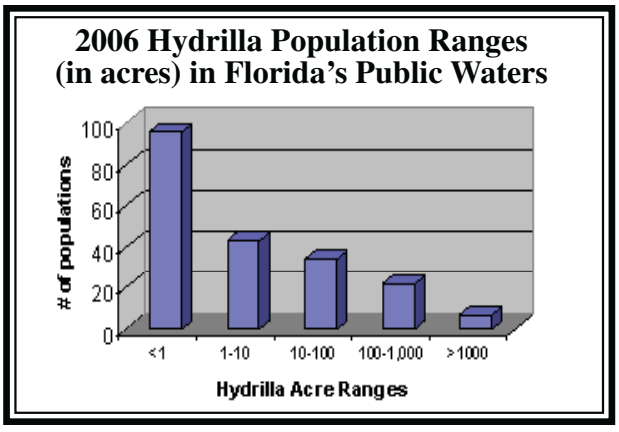
- 1,250 more acres than in FY 04-05
- about 5,000 fewer acres than the previous 5-year average

Managers spent about $8.5 million treating hydrilla during FY 05-06:

- about $1.4 million less than FY 04-05
- about $6.2 million less than the previous 5-year average

As water levels bagan to receed and water clarity improved during 2006, hydrilla likewise began to recover. 2006 inventories found 31,800 acres of hydrilla standing in 202 public water bodies:

- an 11,400 acre increase over 2005
  - hydrilla infested 282 public waters during the past 7 years
  - therefore, tubers may be present in as many as 282 public waters
  - tubers cover an estimated 90,800 acres of public water bodies
  - tubers represent the potential for immediate regrowth
- hydrilla is under maintenance control in 96% of Florida's public water bodies



Wind and wave action from three major hurricanes ripped hydrilla loose in several lakes including Lake Toho below

Operations – Other Plants

Prior to 1994, about $150,000-$350,000 were spent annually managing plants **other than** water hyacinth, water lettuce, and hydrilla:

- funds were insufficient to control higher priority hydrilla problems, so
- little was affordable for other invasive plants.

2006 inventories found 18,000 acres of other invasive plants present in 87% of Florida's public waters. With the exception of about 12,000 acres of torpedograss in Lake Okeechobee, most populations are small and comingled with native plants making their detection and control difficult.

Alternating periods of severe drought followed by flooding, and the three major hurricanes that crossed peninsular Florida in 2004 created floating mats of vegetation, or tussocks, and floating islands of peat and organic deposits in many lakes. Some floating islands had suspended sediments as thick as 4' and supported trees up 10" in diameter and as tall as 50'. Drifting tussocks and floating islands with potential to damage flood control structures and bridges and block access and navigation are the highest control priorities.

While hurricane activity reduced the need for hydrilla control, floating tussock and island control expenditures increased tremendously. Other plant control costs exceeded hydrilla management spending in FY 04-05 and FY 05-06. $9.6 million were spent controlling 21,703 acres of other plants and floating islands in public waters in FY 05-06:

- 99% of the funds were spent controlling 8,247 acres of floating islands/tussocks
- 13,456 acres of Other Plants were controlled including:

  - 192 acres of torpedograss
  - 654 acres of West Indian marsh grass
  - 47 acres of wild taro
  - 6 acres of paragrass
  - 4 acres of aquatic nightshade
  - 13,456 acres of native plants for access, navigation, and habitat improvement

Clockwise from above: Shredder opening trails on Orange Lake, harvester picking up floating island drifting in Croft Lake in the Tsala Apopka Chain of Lakes, harvester and conveyor removing the last of 200 acres of floating islands that surfaced and drifted into the outfall canal on Lake Runnymeade, disposing floating island material at an upland site near lake Runnymeade.

FY 05-06 Management Statistics

Acres of Aquatic Plants Treated and Treatment Expenditures in Florida Public Waters During Fiscal Year 2005 - 2006

(Data represents compilation of all contractor activities within each water management district)

Acres Trtd.	Northwest	Suwannee	St. Johns	Southwest	S. Florida	TOTAL
Floating	806	466	11,459	4,170	20,170	**37,071**
Hydrilla	75	<1	3,592	5,975	8,173	**17,815**
Other Plants	438	94	1,573	3,614	3,898	**9,617**
TOTAL	**1,319**	**560**	**16,624**	**13,759**	**32,241**	**64,503**
Expenditures	**Northwest**	**Suwannee**	**St. Johns**	**Southwest**	**S. Florida**	**TOTAL**
Floating	$ 93,393	$ 56,928	$ 1,222,359	$ 509,592	$ 1,706,070	**$ 3,588,342**
Hydrilla	64,500	367	3,287,914	3,209,079	1,939,086	**8,500,946**
Other Plants	878,507	23,435	882,762	4,569,098	3,229,871	**9,583,673**
TOTAL	**$ 1,036,400**	**$ 80,730**	**$ 5,393,035**	**$ 8,287,769**	**$ 6,875,027**	**$ 21,672,961**

Federal, State and Local Funds Expended during Fiscal Year 2005 - 2006 Managing Aquatic Plants in Florida Public Water Bodies

Government / Plant	Intercounty	Intracounty	TOTAL
Federal			
Floating Plants	$ 1,238,940	0	**$ 1,238,940**
Hydrilla	0	0	**0**
Other Plants	0	0	**0**
Subtotal	**$ 1,238,940**	**0**	**$ 1,238,940**
State			
Floating Plants	$ 2,194,200	$ 77,601	**$ 2,271,801**
Hydrilla	8,309,386	95,780	**8,405,166**
Other Plants	9,548,819	17,427	**9,566,246**
Subtotal	**$ 20,052,405**	**$ 190,808**	**$ 20,243,213**
Local			
Floating Plants	0	$ 77,601	**$ 77,601**
Hydrilla	0	95,780	**95,780**
Other Plants	0	17,427	**17,427**
Subtotal	**0**	**$ 190,808**	**$ 190,808**
TOTAL			
Floating Plants	**$ 3,433,140**	**$ 155,202**	**$ 3,588,342**
Hydrilla	**8,309,386**	**191,560**	**8,500,946**
Other Plants	**9,548,819**	**34,854**	**9,583,673**
GRAND TOTAL	**$ 21,291,345**	**$ 381,616**	**$ 21,672,961**

Funding Needs

The following table lists acres of aquatic plants and floating islands inventoried during 2006 in Florida's 1.26 million acres of public lakes and rivers. The table also includes acres of plants treated and associated costs for FY 05-06 along with estimated acres of plants needing control in FY 06-07 and respective cost allocations from the FY 06-07 Legislative Spending Authority for this control. In addition to the FY 06-07 hydrilla allocation, the BIPM has about $5.3 million of fluridone herbicide in inventory that was purchased during the two previous years but not applied due to hurricane effects including high water and flows and continuing hydrilla suppression from tannic and turbid waters and algae blooms.

The FY 06-07 funding allows managers to:

- sustain floating plant maintenance,
- sustain hydrilla maintenance,
- finnish controlling tussocks and floating islands that are freely drifting in public waters posing threats to navigation, access, bridges, and flood control structures,
- control new infestations of other invasive plants,
- increase control of other established invasive plant populations.

In addition to the aquatic plant control allocation, the BIPM allocated $1.9 million for research, monitoring, and education related to improving aquatic plant management. Included are: 22 research projects, mostly related to biological and herbicide control of invasive plants; mapping projects to estimate water and plant volumes in hydrilla-infested lakes; and education and outreach projects to increase managers' and public understanding of invasive plant problems, the needs for control, and control strategies.

Plant	2006 Acres Present	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Est. Control Acres	FY 06-07 Dollars Allocated
Hydrilla	*90,829	17,815	$ 8,500,946	26,042	$ 11,970,896
Floating plants	5,577	37,071	3,588,342	25,301	3,523,131
Torpedograss	15,396	192	3,709	5,423	930,865
Wild taro	873	47	12,617	225	39,441
Paragrass	1,066	6	1,404	87	14,032
Hygrophila	203	0	0	20	14,000
West Indian marsh grass	297	654	43,259	547	79,390
Napiergrass	161	0	0	0	0
Aquatic nightshade	<1	4	1,661	85	13,250
Water spinach	0	0	0	3	2,350
Giant salvinia	0	0	0	0	0
Other plants	**222,703	1,368	80,071	3,941	1,136,460
Floating tussocks and islands		8,247	9,440,952	1,030	2,769,621
TOTAL ESTIMATE	**335,346**	**65,404**	**$ 21,672,961**	**62,704**	**$ 20,493,436**

* estimated area impacted by hydrilla tubers; **2003 record, Other Plants not quantified in 2006

Aquatic Plant Management Operations in Florida Public Waters for FY 05-06
and
Projected Aquatic Plant Management Needs for FY 06-07

Water Body	Name of public lake or river
Water Acres	Acres of public lake or river
County	County in which the water body lies (Note: many water bodies lie in more than one county, for example: the St. Johns River lies in 11 counties, but for convenience has been assigned to St. Johns County)
Contractor	Agency or company that conducts aquatic plant management
Brevard	Brevard County
Citrus	Citrus County
DEP	Private company under contract with DEP
FWC	Florida Fish & Wildlife Conservation Commission
Highlands	Highlands County
Hillsborough	Hillsborough County
Lake	Lake County
Orange	Orange County
Palm Beach	Palm Beach County
Polk	Polk County
Private	Private companies supervised by FDEP
SFWMD	South Florida Water Management District
SJRWMD	St. Johns River Water Management District
SWFWMD	Southwest Florida Water Management District
USACE	US Army Corps of Engineers
Volusia	Volusia County
WMD	Water Management District in which the water body lies
Plant Type	Floating Plants = water hyacinth and/or water lettuce R = revegetation under contract with FWC
FY 05-06 Acres Treated	Acres of plants managed during fiscal year 05-06
FY 05-06 Dollars Spent	Dollars spent managing plants during fiscal year 05-06
FY 06-07 Acres Ctrl Allocated	Acres of plants permitted for control during fiscal year 06-07 under DEP's Cooperative Program
FY 06-07 Contractor Dollars Allocated	Dollars allocated to manage plants during fiscal year 06-07

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Adalaide, Lake	96	Highlands	Highlands	SW	H	0.0	0.00	1	700
Adalaide, Lake	96	Highlands	Highlands	SW	S. cubensis	1.0	102.38	1	95
Agnes, Lake	386	Polk	polk	SW	F	3.0	388.58	5	750
Alafia River	371	Hillsborough	Hillsborough	sw	F	0.0	0.00	30	6,913
Alford Arms		A&L	Leon	NW	Tussocks	10.0	12,500.00		
Alfred, Lake	736	Polk	polk	SW	F	2.5	407.89	20	3000
Alfred, Lake	736	Polk	polk	SW	H	0.0	0.00	2	1400
Alligator Lake	338	A&L	Columbia	SR	Tussocks	17.6	11,000.00		
Alligator Lake	338	DEP SR	Columbia	sr	F	92.0	15,844.11	15	1500
Alligator Lake	338	DEP SR	Columbia	sr	Frogsbit	0.0	0.00	20	4000
Alligator Lake	338	DEP SR	Columbia	sr	H/coontail	9.8	444.77		
Alligator Lake	338	DEP SR	Columbia	sr	Pennywort	23.0	999.97	20	4000
Alligator Lake	338	DEP SR	Columbia	sr	Taro	5.0	479.43	1	200
Alligator Lake	338	DEP SR	Columbia	sr	Willows	0.0	0.00	5	1000
Alligator Lake	3406	SFWMD	Osceola	SF	F	8.0	2,399.03	20	2800
Alligator Lake	3406	SFWMD	Osceola	SF	H	0.0	0.00	10	7000
Alligator Lake	3406	SFWMD	Osceola	SF	Paragrass	3.0	680.41		
Alligator Lake	3406	SFWMD	Osceola	SF	S. cubensis	3.0	900.42	5	750
Alligator Lake	3406	SFWMD	Osceola	SF	Torpedogras	0.0	0.00	100	17000
Alto, Lake	540	DEP SR	Alachua	sr	F	0.0	0.00	10	1000
Alto, Lake	540	DEP SR	Alachua	sr	H	0.0	0.00	0.1	65
Alto, Lake	540	DEP SR	Alachua	sr	Nuphar	0.0	0.00	1	200
Alto, Lake	540	DEP SR	Alachua	sr	Salvinia	0.0	0.00	1	200
Anclote River	200	SWFWMD	Pasco	SW	F	0.0	0.00	11	2,200
Annie, Lake	539	Polk	polk	SW	F	0.0	0.00	2	300
Annie, Lake	539	Polk	polk	SW	H	2.3	895.73	5	3500
Apopka, Lake	30671	SJRWMD	Orange	sj	cattails	10.0	1,138.56	100	15000
Apopka, Lake	30671	SJRWMD	Orange	sj	F	55.8	8,858.30	100	16000
Apopka, Lake	30671	SJRWMD	Orange	sj	H	368.2	121,123.73	350	227500
Apopka, Lake	30671	SJRWMD	Orange	sj	tussocks	41.8	9,479.76	50	15000
Apopka-Beauclair C	49	Lake	Lake	sj	cattails	0.0	0.00	3.5	448
Apopka-Beauclair C	49	Lake	Lake	sj	F	39.3	4,146.16	70	8960
Apopka-Beauclair C	49	Lake	Lake	sj	H	12.3	856.68	25	1000
Apopka-Beauclair C	49	Lake	Lake	sj	Paragrass	0.0	0.00	3	384
Apopka-Beauclair C	49	Lake	Lake	sj	Torpedogras	0.0	0.00	1	128
Apthorpe, Lake	219	Highlands	Highlands	SW	H	0.0	0.00	1	700
Apthorpe, Lake	219	Highlands	Highlands	SW	S. cubensis	0.0	0.00	1	95
Apthorpe, Lake	219	Highlands	Highlands	SW	Torpedogras	0.0	0.00	1	85
Arbuckle Creek	120	Highlands	Highlands	SW	F	234.0	22,120.39	300	28500
Arbuckle Creek	120	Highlands	Highlands	SW	H	0.0	0.00	1	700
Arbuckle Creek	120	Highlands	Highlands	SW	snag trees	0.0	2,536.73		5000
Arbuckle Creek	120	Highlands	Highlands	SW	Hymenachne	51.0	6,839.66	100	9000
Arbuckle, Lake	3828	Polk	polk	SF	F	350.0	40,878.54	400	60000
Arbuckle, Lake	3828	Polk	polk	SF	H	0.0	0.00	20	14000
Ariana, Lake	1026	Polk	polk	SW	F	0.0	0.00	5	750
Ariana, Lake	1026	Polk	polk	SW	H	25.0	6,671.94	25	17500
Ashby, Lake	1030	Volusia	Volusia	sj	Alligatorweed	0.0	0.00	8	960
Ashby, Lake	1030	Volusia	Volusia	sj	F	0.0	0.00	18	3240
Ashby, Lake	1030	Volusia	Volusia	sj	Parrotsfthr	0.0	0.00	8	960
Ashby, Lake	1030	Volusia	Volusia	sj	S. cubensis	0.0	0.00	10	1600
Ashby, Lake	1030	Volusia	Volusia	sj	Taro	0.0	0.00	2	240
Baker Creek	20	Hillsborough	Hillsborough	sw	F	12.0	3,208.59	20	4,609
Baker Creek	20	Hillsborough	Hillsborough	sw	H	0.0	0.00	2	1552
Banana Lake	342	Polk	polk	SW	F	29.0	5,452.21	50	7500
Banana Lake	342	Polk	polk	SW	H	28.1	6,235.54	50	35000
Barton canal	10	Brevard	Brevard	sj	F	9.5	649.27	20	1800
Barton canal	10	Brevard	Brevard	sj	Bpeppers	0.0	0.00	1	112
Beauclair, Lake	1111	Lake	Lake	sj	cattails	0.0	0.00	1	128
Beauclair, Lake	1111	Lake	Lake	sj	F	9.8	1,142.76	20	2560
Beauclair, Lake	1111	Lake	Lake	sj	H	7.4	889.11	10	400

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Blackwater Creek		DEP SJS		sj	F	10.3	1,426.88		
Blanche, Lake	121	Orange	Orange	SJ	F	0.0	0.00	1	86.3
Blanche, Lake	121	Orange	Orange	SJ	H	45.0	592.08	6	8397.3
Blue Cypress Lake	6555	SJRWMD	Indian River	sj	F	0.0	0.00	100	15000
Blue Cypress Lake	6555	SJRWMD	Indian River	sj	H	0.0	0.00	1	690
Blue Cypress Lake	6555	SJRWMD	Indian River	sj	Hymenachne	0.0	0.00	1	160
Blue Lake	118	Polk	polk	SW	F	0.0	0.00	2	300
Blue Lake	118	Polk	polk	SW	H	1.0	356.68	2	1400
Blue Lake	55	Volusia	Volusia	sj	F	13.0	1,323.45	10	1600
Blue Lake	55	Volusia	Volusia	sj	H	0.3	68.17	5	2500
Blue Lake	55	Volusia	Volusia	sj	Parrotsfthr	1.6	81.89	4	480
Blue Lake	55	Volusia	Volusia	sj	S. cubensis	0.0	0.00	4	640
Boggy Creek		DEP SJN	Nassau	sj	Pennywort	15.0	2,398.09		
Boggy Creek		DEP SJN	Nassau	sj	Taro	4.0	976.02		
Bonnet, Lake	260	Highlands	Highlands	SW	F	1.0	72.04	1	95
Bonnet, Lake	260	Highlands	Highlands	SW	Nuphar	1.1	157.05	3	255
Bonnet, Lake	260	Highlands	Highlands	SW	S. cubensis	1.0	72.04	1	95
Bonny, Lake	354	Polk	polk	SW	F	2.0	370.70	10	1500
Bonny, Lake	354	Polk	polk	SW	H	111.5	1,553.98	200	140000
Bourbeau Park	1.5	Brevard	Brevard	sj	F	4.0	429.24	4	680
Braden River	220	SWFWMD	Manatee	SW	Coontail	3.4	1,356.30	10	5,000
Braden River	220	SWFWMD	Manatee	SW	F	104.1	17,476.73	100	20,000
Braden River	220	SWFWMD	Manatee	SW	H	0.0	0.00	10	8,000
Braden River	220	SWFWMD	Manatee	SW	hymenachne	0.0	0.00	10	2,000
Braden River	220	SWFWMD	Manatee	SW	I. Fistulosa	0.0	0.00	2	400
Braden River	220	SWFWMD	Manatee	SW	Paspalum	0.0	0.00	8	1,600
Brick Lake	616	SFWMD	Osceola	SF	F	39.0	5,952.33	5	700
Brick Lake	616	SFWMD	Osceola	SF	snag trees	0.0	0.00		10000
Bryant, Lake*	767	DEP SJN	Marion	sj	F	0.0	0.00	5	500
Bryant, Lake*	767	DEP SJN	Marion	sj	H	0.0	0.00	0.3	300
Buckeye Lake	71	Polk	polk	SW	F	0.0	0.00	2	300
Buckeye Lake	71	Polk	polk	SW	H	0.0	0.00	1	700
Buffum, Lake	1543	Polk	polk	SW	F	10.0	2,149.33	30	4500
Buffum, Lake	1543	Polk	polk	SW	H	0.0	0.00	1	700
Bugg Springs	7	Lake	Lake	sj	Alligatorweed	0.0	0.00	5	640
Bugg Springs	7	Lake	Lake	sj	F	4.3	430.85	20	2560
Bugg Springs	7	Lake	Lake	sj	H	8.0	324.22	10	400
Bugg Springs	7	Lake	Lake	sj	Pennywort	3.0	184.19	5	640
Bulow Creek	4334	DEP SJS	Flagler	sj	F	24.0	2,780.92	60	9000
Bulow Creek	4334	DEP SJS	Flagler	sj	H	0.0	0.00	5	800
Butler, Lake	420	DEP SR	Union	sr	F	7.5	214.28	5	500
Butler, Lake	420	DEP SR	Union	sr	H	0.0	0.00	0.1	65
Butler, Lake	420	DEP SR	Union	sr	tallow	0.5	177.10	2	400
Butler, Lake	420	DEP SR	Union	sr	Torpedograss	3.5	644.96	10	2000
Butler, Lake	420	Orange	Orange	SF	F	0.0	0.00	3	258.9
Butler, Lake	420	Orange	Orange	SF	H	6.8	4,738.88	16	22392.8
C-35 Toho-Cypress	81	SFWMD	Osceola	SF	cattails	0.0	0.00	2	300
C-35 Toho-Cypress	81	SFWMD	Osceola	SF	F	0.0	0.00	15	2100
C-35 Toho-Cypress	81	SFWMD	Osceola	SF	Paragrass	3.0	723.81		
C-36 Cyprs-Hatch	40	SFWMD	Osceola	SF	F	0.0	0.00	10	1400
C-37 Hatch-Kiss	71	SFWMD	Osceola	SF	F	0.0	0.00	10	1400
C-37 Hatch-Kiss	71	SFWMD	Osceola	SF	Paragrass	0.0	0.00	1.5	225
C-37 Hatch-Kiss	71	SFWMD	Osceola	SF	Smartweed	0.0	0.00	2	300
C-37 Hatch-Kiss	71	SFWMD	Osceola	SF	Torpedograss	0.0	0.00	1.5	225
Cannon Lake	336	Polk	polk	SW	F	0.0	0.00	3	450
Cannon Lake	336	Polk	polk	SW	H	219.0	24,615.47	200	140000
Carlton, Lake	383	Lake	Lake	sj	cattails	0.0	0.00	1	128
Carlton, Lake	383	Lake	Lake	sj	F	0.0	0.00	3	374
Carr Lake(*)	400	DEP NW	Leon	nw	F	43.0	5,560.61	10	1000
Carr Lake(*)	400	DEP NW	Leon	nw	H	0.0	0.00	10	10000

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Carrie, Lake	65	Highlands	Highlands	SW	F	0.0	0.00	2	190
Carrie, Lake	65	Highlands	Highlands	SW	Taro	0.5	119.96	2	190
Carter Road Park	150	Polk	polk	SW	F	0.0	0.00	20	0
Carter Road Park	150	Polk	polk	SW	H	0.0	0.00	30	0
Catfish Crk & canals	30	Highlands	Highlands	SW	F	0.0	0.00	2	190
Catfish Crk & canals	30	Highlands	Highlands	SW	Nuphar	0.0	0.00	2	170
Catfish Crk & canals	30	Highlands	Highlands	SW	snag trees	0.0	0.00		1000
Center, Lake	410	SFWMD	Osceola	SF	F	2.0	1,499.78	20	2800
Center, Lake	410	SFWMD	Osceola	SF	S. cubensis	0.0	0.00	5	750
Chase, Lake	135	Orange	Orange	SF	F	0.0	0.00	3	258.9
Chase, Lake	135	Orange	Orange	SF	H	0.1	55.05	6	8397.3
Chassahowitzka River	1000	Citrus	Citrus	sw	F	2.5	496.38	10	3250
Chassahowitzka River	1000	Citrus	Citrus	sw	Giant reed	0.0	0.00	1	150
Chassahowitzka River	1000	Citrus	Citrus	sw	H	0.0	0.00	5	4875
Chassahowitzka River	1000	Citrus	Citrus	sw	Lyngbia	0.0	0.00	1	5900
Cherry, Lake	396	Lake	Lake	sj	F	2.0	199.58	10	1280
Cherry, Lake	396	Lake	Lake	sj	H	0.0	0.00	1	40
Cherry, Lake	396	Lake	Lake	sj	S. cubensis	0.0	0.00	10	1280
Clark Lake	320	Brevard	Brevard	sj	cattails	0.0	0.00	1	218
Clark Lake	320	Brevard	Brevard	sj	F	0.0	0.00	2	380
Clark Lake	33	Palm Beach	Palm Beach	sf	F	7.5	1,899.76	10	2340
Clark Lake	33	Palm Beach	Palm Beach	sf	H	13.7	10,899.21	40	43582
Clark Lake	33	Palm Beach	Palm Beach	sf	Nymph cris	0.6	118.04	1	268
Clay Lake	467	Highlands	Highlands	SW	F	0.0	0.00	1	95
Clay Lake	467	Highlands	Highlands	SW	H	153.0	3,321.62	150	105000
Clay Lake	467	Highlands	Highlands	SW	S. cubensis	0.0	0.00	1	95
Clay Lake	467	Highlands	Highlands	SW	snag trees	0.0	0.00		1000
Clinch, Lake	1207	Polk	polk	SW	F	5.0	1,285.82	15	2250
Colby, Lake	103	Volusia	Volusia	sj	F	5.4	442.84	8	1440
Colby, Lake	103	Volusia	Volusia	sj	S. cubensis	0.0	0.00	8	1280
Conine, Lake	236	Polk	polk	SW	F	1.3	402.33	5	750
Conine, Lake	236	Polk	polk	SW	H	73.8	38,580.18	125	87500
Conway, Lake	1767	Orange	Orange	SF	F	0.0	0.00	15	1294.5
Conway, Lake	1767	Orange	Orange	SF	H	2.9	191.32	20	27991
Conway, Lake	1767	Orange	Orange	SF	Hygrophila	0.0	0.00	1	2000
Cook, Lake	20	Lake	Lake	sj	F	1.0	73.10	6	768
Cook, Lake	20	Lake	Lake	sj	H	0.0	0.00	1	40
Cook, Lake	20	Lake	Lake	sj	S. cubensis	0.0	0.00	3	384
Coon Lake	148	SFWMD	Osceola	SF	F	15.0	665.75	15	2100
Coon Lake	148	SFWMD	Osceola	SF	H	0.0	0.00	2	2200
Coon Lake	148	SFWMD	Osceola	SF	S. cubensis	0.0	0.00	10	1500
Crescent Lake	143	Lake	Lake	sj	F	0.5	108.55	5	640
Crescent Lake	143	Lake	Lake	sj	H	0.0	0.00	5	200
Crooked Lake	5538	Polk	polk	SW	F	489.5	35,086.60	200	30000
Crooked Lake	5538	Polk	polk	SW	H	0.0	0.00	2	1400
Cross Creek		DEP SJN	Alachua	sj	F	10.8	1,033.21		
Cross Creek		DEP SJN	Alachua	sj	Frogsbit	10.2	1,321.41		
Cross Florida Barge Canal		DEP SJN	Citrus	sj	F	24.0	2,978.27		
Crystal River	1650	Citrus	Citrus	sw	F	28.0	8,457.83	40	10,500
Crystal River	1650	Citrus	Citrus	sw	H	0.0	0.00	10	9750
Crystal River	1650	Citrus	Citrus	sw	Lyngbia	164.3	332,458.39	67	395300
Crystal River	1650	Citrus	Citrus	sw	Milfoil	0.0	0.00	75	30000
Crystal, Lake	1650	Polk	polk	SW	F	0.0	0.00	2	300
Cypress Lake	4097	SFWMD	Osceola	SF	F	95.0	12,702.91	300	42000
Cypress Lake	4097	SFWMD	Osceola	SF	H	1516.0	43,370.13	2200	503000
Cypress Lake	4097	SFWMD	Osceola	SF	tussocks	0.0	0.00	12	60000
Daisy,Lake	133	Polk	polk	SW	F	2.3	558.81	2	300
Daisy,Lake	133	Polk	polk	SW	H	0.0	0.00	2	1400
Daisy,Lake	133	Polk	polk	SW	tussock	2.0	12,265.00		

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Dal Housie, Lake	243	Lake	Lake	sj	F	0.0	0.00	0.5	64
Damon, Lake	300	Highlands	Highlands	SW	F	0.0	0.00	3	285
Damon, Lake	300	Highlands	Highlands	SW	H	0.0	0.00	1	700
Damon, Lake	300	Highlands	Highlands	SW	S. cubensis	0.5	86.03	1	95
David, Lake	49	Lake	Lake	sj	F	0.0	0.00	0.5	64
David, Lake	49	Lake	Lake	sj	H	0.0	0.00	0.5	20
Dead River	148	Lake	Lake	sj	Alligatorweed	0.0	0.00	1	128
Dead River	148	Lake	Lake	sj	cattails	0.0	0.00	1	128
Dead River	148	Lake	Lake	sj	F	4.1	682.60	10	1280
Dead River	148	Lake	Lake	sj	H	9.3	718.07	10	400
Dead River	148	Lake	Lake	sj	Pennywort	0.0	0.00	3	384
Deaton, Lake	778	SWFWMD	Sumter	SW	H	0.0	0.00	1	800
Deer Lake	125	Polk	polk	SW	F	0.8	332.61	2	300
Deer Lake	125	Polk	polk	SW	H	49.4	130.60	50	35000
Deeson,Lake	117	Polk	polk	SW	F	0.0	0.00	2	300
Deeson,Lake	117	Polk	polk	SW	H	43.5	18,562.65	25	17500
Delancy, Lake	342	DEP SJN	Marion	sj	F	2.3	1,865.88	5	500
Delancy, Lake	342	DEP SJN	Marion	sj	H	0.5	807.18	7	3500
Denham, Lake	269	Lake	Lake	sj	F	0.0	0.00	12	1536
Denham, Lake	269	Lake	Lake	sj	Pennywort	1.0	175.39	5	640
Dias, Lake	711	Volusia	Volusia	sj	F	0.4	102.83	10	1800
Dias, Lake	711	Volusia	Volusia	sj	Torpedograss	0.0	0.00	6	870
Dinner Lake	379	Highlands	Highlands	SW	F	0.0	0.00	2	190
Dinner Lake	379	Highlands	Highlands	SW	H	0.0	0.00	1	700
Disston, Lake	1884	DEP SJN	Flagler	sj	F	6.5	1,873.44	20	2900
Disston, Lake	1884	DEP SJN	Flagler	sj	Torpedograss	4.0	823.74	10	1450
Dora Canal	10	Lake	Lake	sj	Alligatorweed	0.0	0.00	1	128
Dora Canal	10	Lake	Lake	sj	F	6.9	713.93	8	1024
Dora Canal	10	Lake	Lake	sj	H	0.8	78.85	3	120
Dora Canal	10	Lake	Lake	sj	Pennywort	0.0	0.00	2	256
Dora, Lake	4475	Lake	Lake	sj	cattails	0.0	0.00	1	128
Dora, Lake	4475	Lake	Lake	sj	F	0.8	152.35	5	640
Dora, Lake	4475	Lake	Lake	sj	H	1.3	275.45	3	120
Dorr, Lake	1533	Lake	Lake	sj	F	1.0	386.05	5	640
Dorr, Lake	1533	Lake	Lake	sj	H	0.0	0.00	0.5	20
Dorr, Lake	1533	Lake	Lake	sj	Taro	0.0	0.00	1	128
Dorr, Lake	1533	Lake	Lake	sj	Torpedograss	0.0	0.00	1	128
Down, Lake	872	Orange	Orange	SF	F	0.0	0.00	2	173
Down, Lake	872	Orange	Orange	SF	H	416.5	854.01	8	11,196
Eagle Lake	651	Polk	polk	SW	F	3.0	560.74	5	750
Eagle Lake	651	Polk	polk	SW	H	0.0	0.00	3	2100
East Lk Toho.	12546	SFWMD	Osceola	SF	F	234.0	21,534.35	400	56000
East Lk Toho.	12546	SFWMD	Osceola	SF	H	0.0	0.00	300	13500
East Lk Toho.	12546	SFWMD	Osceola	SF	Hygrophila	0.0	0.00	15	10500
East Lk Toho.	12546	SFWMD	Osceola	SF	Limnophila	0.0	0.00	50	35000
East Lk Toho.	12546	Weedbusters	Osceola	SF	Tussocks	33.7	132,896.05		
Eaton, Lake	307	DEP SJN	Marion	sj	F	40.3	5,862.77	34	5500
Eaton, Lake	307	DEP SJN	Marion	sj	H	8.1	5,720.09	5	5000
Eaton, Lake	307	DEP SJN	Marion	sj	tussock	48.0	4,083.22	10	2000
Echo,Lake	69	Polk	polk	SW	F	0.0	0.00	2	300
Echo,Lake	69	Polk	polk	SW	H	0.0	0.00	1	700
Econfina River	270	DEP SR	Taylor	sr	Taro	0.0	0.00	0.1	20
Econlockhatchee R.	120	SJRWMD	Seminole	sj	F	0.0	0.00	1	640
Elbert, Lake	173	Polk	polk	SW	F	0.0	0.00	2	300
Elbert, Lake	173	Polk	polk	SW	H	55.5	28,438.67	110	77000
Elbow Creek	5	Brevard	Brevard	sj	F	2.0	330.43	3	510
Elbow Creek	5	Brevard	Brevard	sj	S. cubensis	0.0	0.00	1	170
Ella, Lake	467	Lake	Lake	sj	F	0.0	0.00	0.5	64
Ella, Lake	467	Lake	Lake	sj	H	1.7	218.55	5	200
Eloise, Lake	1160	Polk	polk	SW	F	7.3	1,878.16	10	1500

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Eloise, Lake	1160	Polk	polk	SW	H	26.3	2,231.71	40	28000
Emeralda Marsh CA Area 2		SJRWMD	Lake	sj	F	0.0	0.00	50	5000
Emeralda Marsh CA Area 2		SJRWMD	Lake	sj	H	100.0	1,867.84	200	130,000
Emeralda Marsh CA Area 4		SJRWMD	Lake	sj	F	0.0	0.00	100	16000
Emeralda Marsh CA Area 4		SJRWMD	Lake	sj	H	0.0	0.00	300	195000
Emma, Lake	175	Lake	Lake	sj	F	0.3	72.15	4	512
Emma, Lake	175	Lake	Lake	sj	H	0.0	0.00	2	80
Emma, Lake	175	Lake	Lake	sj	S. cubensis	0.0	0.00	5	640
Eustis, Lake	7806	Lake	Lake	sj	cattails	0.0	0.00	1	128
Eustis, Lake	7806	Lake	Lake	sj	F	11.6	2,797.81	18	2304
Eustis, Lake	7806	Lake	Lake	sj	H	187.0	14,056.01	300	12000
Eva Lake	173	Polk	polk	SW	F	0.0	0.00	2	300
Fairview, Lake	401	Orange	Orange	SJ	F	0.0	0.00	2	173
Fairview, Lake	401	Orange	Orange	SJ	H	3.5	233.44	10	13,996
Fairview, Lake	401	Orange	Orange	SJ	Nymph cris	0.0	0.00	5	1,000
Fannie, Lake	829	Polk	polk	SW	F	3.5	568.50	100	15000
Fannie, Lake	829	Polk	polk	SW	H	255.0	127,506.05	280	196000
Fish Lake	221	SFWMD	Osceola	SF	cattails	0.0	0.00	1	150
Fish Lake	221	SFWMD	Osceola	SF	F	0.0	0.00	10	1400
Fish Lake	221	SFWMD	Osceola	SF	H	0.0	0.00	1	1100
Fish Lake	221	SFWMD	Osceola	SF	Hygrophila	0.0	0.00	2	1000
Fish Lake	221	SFWMD	Osceola	SF	Paragrass	0.0	0.00	1	150
Fish Lake	221	SFWMD	Osceola	SF	Pickrelweed	0.0	0.00	1	150
Fish, Lake	29	Orange	Orange	SJ	F	0.0	0.00	1	86
Fish, Lake	29	Orange	Orange	SJ	H	0.0	0.00	3	4,199
Fisheating Creek		SFWMD	Hendry	SF	F	0.0	0.00	100	13000
Fisheating Creek		SFWMD	Hendry	SF	hymenachne	0.0	0.00	150	19500
Fisheating Creek		SFWMD	Hendry	SF	Paragrass	0.0	0.00	25	3250
Fisheating Creek		SFWMD	Hendry	SF	Wetland Nigh	0.0	0.00	25	3250
Florence Canal &Lake	4	Brevard	Brevard	sj	F	6.0	1,008.17	15	2250
Fox Lake	165	Brevard	Brevard	sj	cattails	1.0	144.84	5	450
Fox Lake	165	Brevard	Brevard	sj	F	44.8	5,528.01	40	6000
Fox Lake	165	Brevard	Brevard	sj	H	0.0	0.00	1	365
Fox Lake	165	Brevard	Brevard	sj	spikerush	2.0	0.00	1	125
Francis, Lake	539	DEP SR	Madison	sr	F	0.0	0.00	1	100
Francis, Lake	539	Highlands	Highlands	SW	cattails	0.0	0.00	0.5	42.5
Francis, Lake	539	Highlands	Highlands	SW	D.Papyrs	0.0	0.00	2	190
Francis, Lake	539	Highlands	Highlands	SW	F	0.5	119.96	2	190
Francis, Lake	539	Highlands	Highlands	SW	H	0.0	0.00	1	700
Francis, Lake	539	Highlands	Highlands	SW	S. cubensis	0.0	0.00	1	95
Francis, Lake	539	Highlands	Highlands	SW	snag trees	0.0	0.00		1000
Ft. Meade Pits	28	Polk	polk	SW	F	0.0	0.00	5	750
Ft. Meade Pits	28	Polk	polk	SW	H	4.5	2,319.26	5	3500
Gant, Lake&Canal	150	SWFWMD	Sumter	SW	cattails	24.9	3,945.37	15	3,000
Gant, Lake&Canal	150	SWFWMD	Sumter	SW	F	36.0	4,988.72	30	6,000
Gant, Lake&Canal	150	SWFWMD	Sumter	SW	H	4.0	2,323.80	2	1,600
Gant, Lake&Canal	150	SWFWMD	Sumter	SW	Nuphar	0.0	0.00	2	500
Garfield, Lake	655	Polk	polk	SW	F	38.0	5,551.47	50	7500
Garfield, Lake	655	Polk	polk	SW	H	0.0	0.00	1	700
Gator, Lake	114	Polk	polk	SW	F	3.5	633.16	5	750
Gentry, Lake	1791	SFWMD	Osceola	SF	F	0.0	0.00	20	2800
Gentry, Lake	1791	SFWMD	Osceola	SF	H	0.0	0.00	30	21000
Gentry, Lake	1791	SFWMD	Osceola	SF	S. cubensis	2.0	560.22	25	4500
Gentry, Lake	1791	SFWMD	Osceola	SF	Torpedogras	0.0	0.00	10	1700
Georges Lake	816	DEP SJN	Putnam	sj	F	4.0	526.44		
Georges Lake	816	DEP SJN	Putnam	sj	Taro	0.0	0.00		
Gibson, Lake	474	Polk	polk	SW	F	55.3	6,562.23	50	7500
Gibson, Lake	474	Polk	polk	SW	H	0.0	0.00	10	7000
Gleason Lake	124	Volusia	Volusia	sj	F	0.0	0.00	2	360
Gleason Lake	124	Volusia	Volusia	sj	H	13.0	4,358.33	20	10000

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Gleason Lake	124	Volusia	Volusia	sj	S. cubensis	0.0	0.00	8	1280
Gleason Lake	124	Volusia	Volusia	sj	Torpedogras	0.0	0.00	8	1280
Glenada, Lake	150	Highlands	Highlands	SW	F	0.5	92.40	3	285
Glenada, Lake	150	Highlands	Highlands	SW	H	9.0	6,094.59	10	7000
Grady, Lake	172	Hillsborough	Hillsborough	sw	F	14.8	4,033.59	40	9,218
Grady, Lake	172	Hillsborough	Hillsborough	sw	H	0.0	0.00	1	777
Grady, Lake	172	Hillsborough	Hillsborough	sw	Pennywort	1.6	360.31	2	461
Grady, Lake	172	Hillsborough	Hillsborough	sw	Primrose	0.6	109.69	2	357
Grasshopper Lake	213	Lake	Lake	sj	F	0.0	0.00	0.5	64
Grasshopper Lake	213	Lake	Lake	sj	H	0.0	0.00	0.5	20
Green canal	6	Brevard	Brevard	sj	cattails	0.0	0.00	1	75
Green canal	6	Brevard	Brevard	sj	F	16.0	1,484.38	15	1800
Griffin, Lake	16505	Lake	Lake	sj	cattails	0.0	0.00	2	256
Griffin, Lake	16505	Lake	Lake	sj	F	71.7	8,182.69	90	11520
Griffin, Lake	16505	Lake	Lake	sj	H	130.5	6,033.37	275	11000
Griffin, Lake	16505	Lake	Lake	sj	Torpedogras	0.0	0.00	2	256
Guano River WMA	1800	DEP SJN	St. Johns	sj	cattails	0.0	0.00	12	1740
Guano River WMA	1800	DEP SJN	St. Johns	sj	F	13.0	2,347.55	80	11600
Guano River WMA	1800	DEP SJN	St. Johns	sj	Bpeppers	0.0	0.00	1	250
Guano River WMA	1800	DEP SJN	St. Johns	sj	Tallow	0.0	0.00	1	250
Haines Creek	780	Lake	Lake	sj	cattails	0.0	0.00	0.5	64
Haines Creek	780	Lake	Lake	sj	F	1.6	312.32	23	2944
Haines Creek	780	Lake	Lake	sj	H	4.3	562.97	20	800
Haines, Lake	716	Polk	polk	SW	F	7.5	1,637.11	15	2250
Haines, Lake	716	Polk	polk	SW	H	0.0	0.00	300	225000
Half Moon, Lk*	340	DEP SJN	Marion	sj	F	0.0	0.00	2	200
Half Moon, Lk*	340	DEP SJN	Marion	sj	H	0.0	0.00	0.1	0
Hall, Lake(*)	172	DEP NW	Leon	nw	F	7.0	928.47	10	1000
Hall, Lake(*)	172	DEP NW	Leon	nw	H	0.0	0.00	0.5	
Halls River	100	Citrus	Citrus	sw	cattails	0.0	0.00	1	350
Halls River	100	Citrus	Citrus	sw	F	0.0	0.00	10	2750
Halls River	100	Citrus	Citrus	sw	G. reed	0.0	0.00	5	1750
Halls River	100	Citrus	Citrus	sw	H	0.0	0.00	5	4875
Halls River	100	Citrus	Citrus	sw	Lyngbia	2.0	14,559.38	1	5900
Hamilton, Lake	2126	Polk	polk	SW	F	9.5	2,435.49	100	15000
Hamilton, Lake	2126	Polk	polk	SW	H	0.0	0.00	5	3500
Hancock, Lake	4519	Polk	polk	SW	F	0.0	0.00	50	7500
Hancock, Lake	4519	Polk	polk	SW	H	0.0	0.00	1	700
Hancock, Lake	4519	SWFWMD	Polk	SW	tussocks	7.0	779.66	10	2,000
Harris, Lake	13788	DEP SJS	Lake	sj	H	210.0	1,326.00		
Harris, Lake	13788	Lake	Lake	sj	cattails	0.0	0.00	1	128
Harris, Lake	13788	Lake	Lake	sj	F	23.3	3,201.90	25	3200
Harris, Lake	13788	Lake	Lake	sj	H	1356.3	29,358.82	1000	40000
Harris, Lake	13788	Lake	Lake	sj	Torpedogras	0.0	0.00	2	256
Hart, Lake	1850	SFWMD	Osceola	SF	F	7.0	865.49	20	2800
Hart, Lake	1850	SFWMD	Osceola	SF	H	0.0	0.00	1	700
Hart, Lake	1850	SFWMD	Osceola	SF	S. cubensis	0.0	0.00	5	750
Hartridge, Lake	434	Polk	polk	SW	F	0.3	89.22	3	450
Hartridge, Lake	434	Polk	polk	SW	H	40.0	12,911.90	20	14000
Hatchineha Canals	100	Polk	polk	SW	F	12.0	1,954.70	25	3750
Hatchineha Canals	100	Polk	polk	SW	H	0.0	0.00	5	3500
Hatchineha, Lake	6665	SFWMD	Osceola	SF	F	79.0	15,536.87	500	70000
Hatchineha, Lake	6665	SFWMD	Osceola	SF	Frogsbit	0.0	0.00	15	2250
Hatchineha, Lake	6665	SFWMD	Osceola	SF	H	1182.0	25,873.65	1500	600000
Hatchineha, Lake	6665	SFWMD	Osceola	SF	S. cubensis	0.0	0.00	5	750
Hatchineha, Lake	6665	SFWMD	Osceola	SF	Scleria lacus	0.0	0.00	25	3750
Hatchineha, Lake	6665	SFWMD	Osceola	SF	tussock	0.0	0.00	15	30000
Helen, Lake	25	Volusia	Volusia	sj	Alligatorweed	1.6	111.18	3	360
Helen, Lake	25	Volusia	Volusia	sj	H	0.5	182.75	0.5	250
Helena Run	38	Lake	Lake	sj	F	10.0	1,069.02	19	2432

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Helena Run	38	Lake	Lake	sj	H	36.4	1,344.59	25	1000
Hellen-Blazes, Lake	381	SJRWMD	Brevard	sj	cattails	0.0	0.00	4	640
Hellen-Blazes, Lake	381	SJRWMD	Brevard	sj	F	40.5	5,292.89	40	6400
Hellen-Blazes, Lake	381	SJRWMD	Brevard	sj	Frogsbit	0.0	0.00	1	160
Henry, Lake	64	Highlands	Highlands	SW	F	0.5	69.07	1	95
Henry, Lake	64	Highlands	Highlands	SW	H	0.0	0.00	1	700
Henry, Lake	64	Highlands	Highlands	SW	S. cubensis	0.0	0.00	1	95
Henry, Lake	64	Highlands	Highlands	SW	snag trees	0.0	0.00		1000
Hiawatha, Lake	48	Lake	Lake	sj	cattails	0.0	0.00	1	128
Hiawatha, Lake	48	Lake	Lake	sj	F	1.6	384.97	35	4480
Hiawatha, Lake	48	Lake	Lake	sj	H	0.0	0.00	2	80
Hillsborough River	443	Hillsborough	Hillsborough	sw	F	111.8	29,988.60	117	21,266
Hillsborough River	443	Hillsborough	Hillsborough	sw	H	1.0	291.70	1	777
Hillsborough River	443	Hillsborough	Hillsborough	sw	Paspalum	1.5	0.00	5	893
Hillsborough River	443	Hillsborough	Hillsborough	sw	Pennywort	5.3	794.44	5	893
Hillsborough River	443	Hillsborough	Hillsborough	sw	Primrose	0.0	0.00	5	893
Holden's Pond	80	DEP SJN	Alachua	sj	F	2.0	304.29	15	1625
Holden's Pond	80	DEP SJN	Alachua	sj	H	0.2	64.51	0.1	70
Holden's Pond	80	DEP SJN	Alachua	sj	Taro	0.0	0.00	0.5	100
Holden's Pond	80	DEP SJN	Alachua	sj	Torpedograss	0.0	0.00	0.5	100
Hollingsworth, Lake	356	Polk	polk	SW	F	0.5	200.10	2	300
Hollingsworth, Lake	356	Polk	polk	SW	H	49.9	1,594.67	75	52500
Holly Lake	98	Lake	Lake	sj	F	0.0	0.00	0.5	64
Holly Lake	98	Lake	Lake	sj	H	0.0	0.00	1	40
Homestead Cnl	11	Brevard	Brevard	sj	F	0.0	0.00	1	110
Homosassa River	800	Citrus	Citrus	sw	F	0.0	0.00	15	4375
Homosassa River	800	Citrus	Citrus	sw	H	0.0	0.00	3	2925
Homosassa River	800	Citrus	Citrus	sw	Lyngbia	3.2	31,597.67	20	118000
Homosassa River	800	Citrus	Citrus	sw	Millfoil	0.0	0.00	30	12000
Homosassa River	800	Citrus	Citrus	sw	W.Spinach	0.0	0.00	1	350
Howard, Lake	628	Polk	polk	SW	F	0.5	143.48	3	450
Howard, Lake	628	Polk	polk	SW	H	1.3	276.12	50	35000
Hunter, Lake	100	Polk	polk	SW	F	0.0	0.00	2	300
Hunter, Lake	100	Polk	polk	SW	H	0.0	0.00	1	700
Hunter, Lake	302	SWFWMD	Hernando	SW	F	0.0	0.00	5	1,000
Hunter, Lake	302	SWFWMD	Hernando	SW	H	1.5	810.93	10	8,000
Hunter, Lake	302	SWFWMD	Hernando	SW	Maidencane	0.0	0.00	1	200
Hunter, Lake	302	SWFWMD	Hernando	SW	Nuphar	0.0	0.00	1	200
Huntley, Lake	500	Highlands	Highlands	SW	cattails	0.0	0.00	5	425
Huntley, Lake	500	Highlands	Highlands	SW	D.Papyrs	1.5	297.06	4	380
Huntley, Lake	500	Highlands	Highlands	SW	F	0.5	92.40	5	475
Huntley, Lake	500	Highlands	Highlands	SW	H	0.0	0.00	1	700
Huntley, Lake	500	Highlands	Highlands	SW	S. cubensis	0.0	0.00	2	190
Hurrah, Lake	16	Hillsborough	Hillsborough	sw	F	0.0	0.00	5	1,152
Iamonia	5757	A&L	Leon	NW	Tussocks	40.0	32,500.00		
Iamonia, Lake	5757	DEP NW	Leon	nw	F	368.5	40,665.16	250	25000
Iamonia, Lake	5757	DEP NW	Leon	nw	Frogsbit	0.0	0.00	20	3000
Iamonia, Lake	5757	DEP NW	Leon	nw	H	0.0	0.00	1	
Iamonia, Lake	5757	DEP NW	Leon	nw	nyph/cab	0.0	0.00	126	25000
Iamonia, Lake	5757	DEP NW	Leon	nw	S. cubensis	0.0	0.00	25	2500
Ichetucknee River	100	DEP SR	Columbia	sr	F	0.0	0.00	5	625
Ida, Lake	159	Palm Beach	Palm Beach	sf	Alligatorweed	0.0	0.00	1	682.5
Ida, Lake	159	Palm Beach	Palm Beach	sf	F	4.5	1,211.61	10	2188
Ida, Lake	159	Palm Beach	Palm Beach	sf	H	9.0	14,565.12	20	26374
Ida, Lake	159	Palm Beach	Palm Beach	sf	Taro	0.0	0.00	0.5	341.25
Ida, Lake	159	Palm Beach	Palm Beach	sf	Torpedograss	0.0	0.00	0.5	341.25
Idylwild, Lake	102	Polk	polk	SW	F	0.3	89.22	2	300
Idylwild, Lake	102	Polk	polk	SW	H	75.0	3,474.70	75	52500
Isabell, Lake	95	Highlands	Highlands	SW	cattails	0.0	0.00	1	85

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Isabell, Lake	95	Highlands	Highlands	SW	F	0.5	54.82	5	475
Isabell, Lake	95	Highlands	Highlands	SW	hymenachne	1.0	69.66	1	90
Isabell, Lake	95	Highlands	Highlands	SW	S. cubensis	0.5	54.82	1	95
Isleworth, Lake	56	Orange	Orange	SF	F	0.0	0.00	1	86
Isleworth, Lake	56	Orange	Orange	SF	H	0.3	27.53	15	20,993
Istokpoga, Lake	27692	Highlands	Highlands	SF	cattails	0.0	0.00	5	425
Istokpoga, Lake	27692	Highlands	Highlands	SF	F	2441.0	187,451.32	2000	190,000
Istokpoga, Lake	27692	Highlands	Highlands	SF	H	0.0	0.00	700	490,000
Istokpoga, Lake	27692	Highlands	Highlands	SF	Nuphar	2.2	216.91	5	425
Istokpoga, Lake	27692	Highlands	Highlands	SF	snag trees	112.6	0.00		25,000
Istokpoga, Lake	27692	Highlands	Highlands	SF	Taro	0.0	0.00	15	1,425
Istokpoga, Lake	27692	Highlands	Highlands	SF	Hymenachne	0.0	0.00	10	900
Jacks Creek	5	Highlands	Highlands	SW	F	0.0	0.00	1	95
Jacks Creek	5	Highlands	Highlands	SW	snag trees	0.0	0.00		1,000
Jackson Creek	50	Highlands	Highlands	SW	F	0.0	0.00	10	950
Jackson Creek	50	Highlands	Highlands	SW	Nuphar	0.0	0.00	10	850
Jackson, Lake	3400	Highlands	Highlands	SW	F	2.0	197.46	5	475
Jackson, Lake	3400	Highlands	Highlands	SW	H	0.0	0.00	1	700
Jackson, Lake	3400	Highlands	Highlands	SW	S. cubensis	0.0	0.00	3	285
Jackson, Lake	3400	Highlands	Highlands	SW	snag trees	0.0	0.00		1,000
Jackson, Lake	1020	SFWMD	Osceola	SF	F	8.0	2,569.92	200	28000
Jackson, Lake	1020	SFWMD	Osceola	SF	Frogsbit	0.0	0.00	10	1500
Jackson, Lake	1020	SFWMD	Osceola	SF	H	301.0	7,297.18	900	370000
Jackson, Lake	1020	SFWMD	Osceola	SF	S. cubensis	0.0	0.00	5	750
Jackson, Lake	1020	SFWMD	Osceola	SF	Smartweed	2.0	648.69		
Jackson, Lake	1020	SFWMD	Osceola	SF	Torpedograss	0.0	0.00	100	18000
Jackson, Lake*	4000	DEP NW	Leon	nw	F	24.0	4,260.81	20	2000
Jackson, Lake*	4000	DEP NW	Leon	nw	H	0.0	0.00	200	45000
Jackson, Lake*	4000	DEP NW	Leon	nw	Torpedograss	0.0	0.00	10	1500
James Canal	8	Brevard	Brevard	sj	F	4.5	418.84	5	550
Jessamine, Lake	306	Orange	Orange	SJ	F	0.0	0.00	3	259
Jessamine, Lake	306	Orange	Orange	SJ	H	19.0	738.25	50	69,978
Jessie, Lake	190	Polk	polk	SW	F	0.0	0.00	2	300
Jessie, Lake	190	Polk	polk	SW	H	65.1	17,162.02	90	63000
Jessup		DEP SJS	Seminole	sj	H	3.0	1,803.44	30	24000
Jessup		DEP SJS	Seminole	sj	Torpedograss	0.0	0.00	20	3300
Johns Lake	2417	Lake	Lake	sj	cattails	0.0	0.00	1	128
Johns Lake	2417	Lake	Lake	sj	F	71.5	5,238.86	75	9600
Johns Lake	2417	Lake	Lake	sj	H	171.7	3,634.42	150	6000
Johnson Lake*	52	DEP SJN	Alachua	sj	F	0.0	0.00	3	325
Johnson Lake*	52	DEP SJN	Alachua	sj	H	0.0	0.00	0.1	70
Johnson Lake*	52	DEP SJN	Alachua	sj	Taro	0.0	0.00	0.1	20
Josephine Creek	20	Highlands	Highlands	SW	F	3.0	300.94	10	950
Josephine Creek	20	Highlands	Highlands	SW	H	0.0	0.00	1	700
Josephine Creek	20	Highlands	Highlands	SW	S. cubensis	0.0	0.00	1	95
Josephine, Lake	1236	Highlands	Highlands	SW	F	27.0	2,032.07	60	5,700
Josephine, Lake	1236	Highlands	Highlands	SW	H	0.0	0.00	1	700
Josephine, Lake	1236	Highlands	Highlands	SW	S. cubensis	0.0	0.00	10	950
Juliana, Lake	926	Polk	polk	SW	F	3.0	526.43	3	450
Juliana, Lake	926	Polk	polk	SW	H	3.3	1,383.98	2	1400
Jumper	305	A&L	Marion	SJ	Tussocks	13.8	17,250.00		
Jumper, Lake*	305	DEP SJN	Alachua	sj	F	64.6	7,072.85	24	4000
Jumper, Lake*	305	DEP SJN	Alachua	sj	H	0.0	0.00	0.1	0
Jumper, Lake*	305	DEP SJN	Alachua	sj	tussock	0.0	0.00	10	2000
June-In-Winter, Lake	3504	Highlands	Highlands	SW	F	4.5	404.04	5	475
June-In-Winter, Lake	3504	Highlands	Highlands	SW	H	0.0	0.00	1	700
June-In-Winter, Lake	3504	Highlands	Highlands	SW	S. cubensis	0.0	0.00	2	190
June-In-Winter, Lake	3504	Highlands	Highlands	SW	Taro	2.0	233.62	3	285
Juniper Lake	665	DEP NW	Walton	nw	bacopa	0.0	0.00	20	20000
Juniper Lake	665	DEP NW	Walton	nw	Snags	0.0	0.00		

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Juniper Lake	665	Hondo Ent.	Walton	NW	Tussocks	120.0	660,000.00		
Katie Landing		DEP SJS		sj	F	13.0	1,192.09		
Kerr, Lake(s)*	2830	DEP SJN	Marion	sj	F	24.0	2,335.56	25	2500
Kerr, Lake(s)*	2830	DEP SJN	Marion	sj	Frogsbit	13.0	660.16		
Kerr, Lake(s)*	2830	DEP SJN	Marion	sj	H	21.9	34,243.55	38	52000
Kissimmee Canals	100	Polk	polk	SW	F	49.0	5,505.09	50	7500
Kissimmee Canals	100	Polk	polk	SW	H	0.0	0.00	5	3500
Kissimmee River	2340	A&L	Osceola	SF	Tussocks	10.4	6,500.00		
Kissimmee River	2340	SFWMD	Osceola	SF	F	5194.0	312,798.07	3500	490000
Kissimmee River	2340	SFWMD	Osceola	SF	H	0.0	0.00	10	7000
Kissimmee River	2340	SFWMD	Osceola	SF	hymenachne	0.0	0.00	50	8500
Kissimmee River	2340	SFWMD	Osceola	SF	Limpo grass	0.0	0.00	500	85000
Kissimmee River	2340	SFWMD	Osceola	SF	nuphar	0.0	0.00	10	1500
Kissimmee River	2340	SFWMD	Osceola	SF	Torpedogras	4.0	786.67	10	1700
Kissimmee River	2340	SFWMD	Osceola	SF	tussock	0.0	0.00	90	50500
Kissimmee, Lake	34948	A&L	Osceola	SF	Tussocks	1.0	2,250.00		
Kissimmee, Lake	34948	SFWMD	Osceola	SF	F	3047.0	222,146.02	2250	337500
Kissimmee, Lake	34948	SFWMD	Osceola	SF	H	1238.0	53,574.68	6000	1000000
Kissimmee, Lake	34948	SFWMD	Osceola	SF	hymenachne	600.0	36,000.00	2	300
Kissimmee, Lake	34948	SFWMD	Osceola	SF	Tussock	316.0	63,260.00	100	200000
Lafayette	2000	A&L	Leon	NW	Tussocks	105.6	70,250.00		
Lafayette, Lake	2000	DEP NW	Leon	nw	Brasenia	0.0	0.00	30	12000
Lafayette, Lake	2000	DEP NW	Leon	nw	F	4.0	529.66	40	4000
Lafayette, Lake	2000	DEP NW	Leon	nw	Frogsbit	0.0	0.00	15	2250
Lafayette, Lake	2000	DEP NW	Leon	nw	S. cubensis	0.0	0.00	15	2250
Lafayette, Lake	2000	DEP NW	Leon	nw	Tussock	0.0	0.00	10	24000
Lawne, Lake	156	Orange	Orange	SJ	F	0.0	0.00	3	258.9
Lawne, Lake	156	Orange	Orange	SJ	H	0.4	110.10	1	1399.55
Lelia, Lake	165	Highlands	Highlands	SW	F	0.0	0.00	1	95
Lelia, Lake	165	Highlands	Highlands	SW	H	0.5	117.72	1	700
Lena, Lake	207	Polk	polk	SW	F	0.3	347.00	2	300
Lena, Lake	207	Polk	polk	SW	H	3.5	961.28	5	3500
Letta Lake	478	Highlands	Highlands	SW	F	0.0	0.00	1	95
Letta Lake	478	Highlands	Highlands	SW	H	0.0	0.00	1	700
Letta Lake	478	Highlands	Highlands	SW	S. cubensis	0.0	0.00	1	95
Lindsey, Lake	137	SWFWMD	Hernando	SW	F	4.0	395.69	10	2,000
Lindsey, Lake	137	SWFWMD	Hernando	SW	Nuphar	2.0	711.59	10	2,000
Lindsey, Lake	137	SWFWMD	Hernando	SW	S. cubensis	0.0	0.00	3	600
Little Orange Lake	818	DEP SJN	Alachua	sj	F	2.0	283.25	20	2375
Little Orange Lake	818	DEP SJN	Alachua	sj	H	0.0	0.00	0.5	350
Little Orange Lake	818	DEP SJN	Alachua	sj	Taro	0.0	0.00	1	200
Little Red Water Lake	66	Highlands	Highlands	SW	cattails	0.0	0.00	1	85
Little Red Water Lake	66	Highlands	Highlands	SW	H	1.0	704.54		
Little Red Water Lake	66	Highlands	Highlands	SW	S. cubensis	2.0	181.65	5	475
Livingston, Lake	1203	Polk	polk	SW	F	2.5	630.73	25	3750
Livingston, Lake	1203	Polk	polk	SW	H	0.0	0.00	25	17500
Lizzie, Lake	792	SFWMD	Osceola	SF	F	81.0	1,710.86	5	650
Lizzie, Lake	792	SFWMD	Osceola	SF	H	0.0	0.00	2	1400
Lizzie, Lake	792	SFWMD	Osceola	SF	S. cubensis	0.0	0.00	5	750
Lizzie, Lake	792	SFWMD	Osceola	SF	Torpedogras	0.0	0.00	10	1700
Lochloosa, Lake	5705	DEP SJN	Alachua	sj	F	338.9	23,154.58	250	27500
Lochloosa, Lake	5705	DEP SJN	Alachua	sj	H	5.0	1,745.63	5	3500
Lochloosa, Lake	5705	DEP SJN	Alachua	sj	Taro	0.0	0.00	5	1000
Lochloosa, Lake	5705	DEP SJN	Alachua	sj	Tussocks	10.0	708.98		
Lofton Creek		DEP SJN	Nassau	sj	Taro	1.0	701.42		
Lotela, Lake	802	Highlands	Highlands	SW	F	0.0	0.00	1	95
Lotela, Lake	802	Highlands	Highlands	SW	H	0.0	0.00	2	1,400
Lotela, Lake	802	Highlands	Highlands	SW	S. cubensis	1.0	167.42	1	95
Loughman, Lake	600	Brevard	Brevard	sj	cattails	0.0	0.00	1	218
Loughman, Lake	600	Brevard	Brevard	sj	F	0.0	0.00	4	760

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Louisa Lake	3364	Lake	Lake	sj	F	7.3	914.90	22	2816
Louise, Lake	145	Orange	Orange	SF	F	0.0	0.00	1	86.3
Louise, Lake	145	Orange	Orange	SF	H	127.3	2,402.91	30	41987
Lower Lake Louise	257	Volusia	Volusia	sj	F	19.4	1,783.41	12	1920
Lower Lake Louise	257	Volusia	Volusia	sj	H	2.8	1,093.04	6	4200
Lower Lake Louise	257	Volusia	Volusia	sj	S. cubensis	0.0	0.00	12	1920
Loxahatchee River		SFWMD	Palm Beach	SF	F	0.0	0.00	7	910
Loxahatchee River		SFWMD	Palm Beach	SF	Hygrophila	0.0	0.00	2	500
Loxahatchee River		SFWMD	Palm Beach	SF	Limnophila	0.0	0.00	2	500
Loxahatchee River		SFWMD	Palm Beach	SF	Paragrass	0.0	0.00	2	260
Ltl. Manatee River	150	Hillsborough	Hillsborough	sw	F	0.0	0.00	2	357
Ltl. Manatee River	150	Hillsborough	Hillsborough	sw	Paspalum	0.0	0.00	1	179
Ltl. Manatee River	150	Hillsborough	Hillsborough	sw	Pennywort	0.0	0.00	1	179
Lucy, Lake	335	Lake	Lake	sj	F	0.3	91.34	2.25	288
Lucy, Lake	335	Lake	Lake	sj	H	0.0	0.00	1	40
Lucy, Lake	335	Lake	Lake	sj	S. cubensis	0.0	0.00	3	384
Lullwater, Lake		DEP NW		nw	F	10.5	839.62	20	2000
Lulu, Lake	301	Polk	pok	SW	F	2.0	614.46	10	1500
Lulu, Lake	301	Polk	pok	SW	H	107.8	17,536.31	250	187500
Manatee River	30	SWFWMD	Manatee	SW	F	64.1	10,775.04	55	11,000
Manatee River	30	SWFWMD	Manatee	SW	hymenachne	0.0	0.00	3	600
Manatee River	30	SWFWMD	Manatee	SW	Paragrass	0.0	0.00	5	1,000
Mann, Lake	244	Orange	Orange	SF	F	0.0	0.00	2	172.6
Mann, Lake	244	Orange	Orange	SF	H	0.0	0.00	5	6997.75
Mariam, Lake	199	Polk	pok	SW	F	0.3	139.95	2	300
Marian, Lake	5739	SFWMD	Osceola	SF	F	57.0	11,233.13	250	35000
Marian, Lake	5739	SFWMD	Osceola	SF	H	1.0	1,039.12	100	37000
Marion, Lake	2990	Polk	pok	SF	F	16.0	2,528.58	50	7500
Marion, Lake	2990	Polk	pok	SF	H	0.0	0.00	5	3500
Marion, Lake	2990	Polk	pok	SF	tussock	36.0	468,007.97		
Martha, Lake	85	Polk	pok	SF	F	0.0	0.00	2	300
Martha, Lake	85	Polk	pok	SF	H	53.1	16,714.33	50	35000
Mary Jane, Lake	1158	SFWMD	Osceola	SF	F	19.0	4,051.23	80	11200
Mary Jane, Lake	1158	SFWMD	Osceola	SF	Tussocks	0.0	0.00	10	10000
Mattie, Lake	1078	Polk	pok	SW	F	38.0	8,300.74	60	9000
Mattie, Lake	1078	Polk	pok	SW	H	0.5	473.18	2	1400
Maude, Lake	55	Polk	pok	SW	F	0.0	0.00	2	300
Maude, Lake	55	Polk	pok	SW	H	0.0	0.00	45	31500
May, Lake	44	Polk	pok	SW	F	3.0	492.09	2	300
May, Lake	44	Polk	pok	SW	H	5.7	1,126.09	2	1400
McKethan, Lake		SWFWMD	Hernando	SW	F	2.8	163.46	10	2,000
McKethan, Lake		SWFWMD	Hernando	SW	grasses	2.1	349.09		
McKethan, Lake		SWFWMD	Hernando	SW	maidencane	0.0	0.00	2	400
McKethan, Lake		SWFWMD	Hernando	SW	S. cubensis	2.0	290.88	5	1,000
McLeod, Lake	512	Polk	pok	SW	F	0.0	0.00	5	750
McLeod, Lake	512	Polk	pok	SW	H	0.0	0.00	1	700
Medard Reservoir	647	SWFWMD	Hillsborough	SW	F	44.0	6,126.86	50	10,000
Medard Reservoir	647	SWFWMD	Hillsborough	SW	H	4.0	3,471.70	20	16,000
Menzi, Lake	22	Polk	pok	SW	F	0.0	0.00	2	300
Menzi, Lake	22	Polk	pok	SW	H	0.0	0.00	1	700
Merritt's Mill Pond	202	DEP NW	Jackson	nw	Coontail	0.0	0.00	10	10000
Merritt's Mill Pond	202	DEP NW	Jackson	nw	Eelgrass/coo	0.0	0.00	10	10000
Merritt's Mill Pond	202	DEP NW	Jackson	nw	H	0.0	0.00	2	
Miccosukee	6276	A&L	Jefferson	NW	Tussocks	52.0	32,500.00		
Miccosukee, Lake	6276	DEP NW	Leon	nw	F	0.0	0.00	1	
Miccosukee, Lake	6276	DEP NW	Leon	nw	Frogsbit	28.0	3,757.27	200	30000
Miccosukee, Lake	6276	DEP NW	Leon	nw	H	0.0	0.00	1	
Miccosukee, Lake	6276	DEP NW	Leon	nw	Maidencane	0.0	0.00	100	50000
Miccosukee, Lake	6276	DEP NW	Leon	nw	nyph/cab	0.0	0.00	50	50000
Middle Lake	215	SWFWMD	Pasco	SW	F	8.0	1,163.51	10	2,000

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Middle Lake	215	SWFWMD	Pasco	SW	H	0.0	0.00	2	1,000
Middle Lake	215	SWFWMD	Pasco	SW	S. cubensis	0.0	0.00	5	1,000
Mill Dam, Lake*	210	DEP SJN	Marion	sj	F	0.0	0.00	3	300
Mill Dam, Lake*	210	DEP SJN	Marion	sj	H	0.0	0.00	0.1	
Miller Lake	7	Volusia	Volusia	sj	Brush	0.0	0.00	3	480
Miller Lake	7	Volusia	Volusia	sj	F	6.7	465.34	6	1080
Miller Lake	7	Volusia	Volusia	sj	S. cubensis	0.0	0.00	4	640
Miller Lake	7	Volusia	Volusia	sj	snag trees	0.0	0.00		2500
Mills Creek		DEP SJN	Nassau	sj	Pennywort	19.0	1,999.26		
Minnehaha, Lake	2261	Lake	Lake	sj	F	4.1	982.13	10	1280
Minnehaha, Lake	2261	Lake	Lake	sj	H	0.0	0.00	1	40
Minnehaha, Lake	2261	Lake	Lake	sj	S. cubensis	0.0	0.00	0.5	64
Minneola, Lake	1888	Lake	Lake	sj	Bpepper	0.8	502.26	2	256
Minneola, Lake	1888	Lake	Lake	sj	F	0.1	146.27	10	1280
Minneola, Lake	1888	Lake	Lake	sj	H	0.0	0.00	1	40
Minneola, Lake	1888	Lake	Lake	sj	S. cubensis	0.0	0.00	2	256
Miona, Lake	272	SWFWMD	Sumter	SW	H	0.5	263.47	2	1600
Mirror, Lake	123	Polk	polk	SW	F	0.0	0.00	2	300
Mirror, Lake	123	Polk	polk	SW	H	56.5	13,717.48	60	42000
Monroe, Lake	9406	DEP SJS	Volusia	sj	Exotic Nympl	0.0	0.00	5	750
Monroe, Lake	9406	DEP SJS	Volusia	sj	H	0.0	0.00	100	80000
Montgomery	36	DEP SR	Columbia	sr	F	0.0	0.00	0.5	50
Montgomery	36	DEP SR	Columbia	sr	H	0.1	122.85	0.2	130
Montgomery	36	DEP SR	Columbia	sr	Taro	0.0	0.00	0.5	100
Montgomery	36	DEP SR	Columbia	sr	Torpedogras	0.1	215.35		
Moss Lee Lake	129	DEP SJN	Putnam	sj	cattails	0.0	0.00	1	200
Moss Lee Lake	129	DEP SJN	Putnam	sj	F	1.5	169.39	10	1125
Moss Lee Lake	129	DEP SJN	Putnam	sj	H	0.0	0.00	0.5	500
Mountain Lake	127	SWFWMD	Hernando	SW	F	0.0	0.00	12	2,400
Mountain Lake	127	SWFWMD	Hernando	SW	S. cubensis	13.7	892.25	5	1,000
Mountain Lake	127	SWFWMD	Hernando	SW	tussock	1.1	2,367.99		
Mountain Lake	127	SWFWMD	Hernando	SW	Hymenachne	2.1	349.09	5	1,000
Mud Lake	133	Polk	polk	SW	F	1.5	301.72	10	1500
Munson, Lake(*)	255	DEP NW	Leon	nw	F	1.3	855.92	20	2000
Munson, Lake(*)	255	DEP NW	Leon	nw	H	0.0	0.00		
Myakka River	790	SWFWMD	Sarasota	SW	F	46.6	10,288.90	200	30,000
Myakka River	790	SWFWMD	Sarasota	SW	Frogsbit	0.0	0.00	2	500
Myakka River	790	SWFWMD	Sarasota	SW	Paragrass	0.0	0.00	8	2,000
Myakka River	790	SWFWMD	Sarasota	SW	W. Spinach	0.0	0.00	2	2,000
Mystic Lake	47	DEP SR	Madison	sr	F	0.0	0.00	1	100
Mystic Lake	47	DEP SR	Madison	sr	Tussock	0.0	0.00	4	800
Nassau River	5785	DEP SJN	Nassau	sj	F	0.0	0.00	10	1000
Nassau River	5785	DEP SJN	Nassau	sj	Pennywort	0.0	0.00	40	8000
Nassau River	5785	DEP SJN	Nassau	sj	Taro	0.0	0.00	5	1000
Ned, Lake	74	Polk	polk	SW	F	4.0	548.27	5	750
Ned, Lake	74	Polk	polk	SW	H	0.0	0.00	3	2100
Newnans Lake	7428	DEP SJN	Alachua	sj	F	425.3	44,015.12	250	30,000
Newnans Lake	7428	DEP SJN	Alachua	sj	H	0.0	0.00	1	1000
Norris, Lake	1131	Lake	Lake	sj	F	0.8	152.02	14	1792
North Lake Talmadge	121	Volusia	Volusia	sj	F	3.0	235.32	8	1440
North Lake Talmadge	121	Volusia	Volusia	sj	H	0.0	0.00	1	500
North Lake Talmadge	121	Volusia	Volusia	sj	S. cubensis	0.0	0.00	6	960
Ocean Pond		DEP SR	Columbia/Ba	sr	maidencane	0.0	0.00	1	200
Ocean Pond		DEP SR	Columbia/Ba	sr	Torpedogras	1.0	276.64	1	200
Okahumpka, Lake	670	SWFWMD	Sumter	SW	F	12.0	1,130.85	20	3,000
Okahumpka, Lake	670	SWFWMD	Sumter	SW	H	212.3	56,219.79	250	80,000
Okahumpka, Lake	670	SWFWMD	Sumter	SW	S. cubensis	0.0	0.00	10	2,000
Okahumpka, Lake	670	SWFWMD	Sumter	SW	tussock/scirp	5.2	380.91		
Okeechobee, Lake	448000	ACOE	Okeechobee	SF	F	7257.5	701,509.95		
Okeechobee, Lake	448000	SFWMD	Okeechobee	SF	hymenachne	0.0	0.00	200	34000

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Okeechobee, Lake	448000	SFWMD	Okeechobee	SF	Torpedograss	0.0	0.00	5000	850000
Okeechobee, Lake	448000	SFWMD	Okeechobee	SF	Tussocks	0.0	0.00	50	90000
Okeechobee, Lake	448000	Texas	Okeechobee	SF	Tussocks	410.9	741,889.00		
Olivia, Lake	86	Highlands	Highlands	SW	H	0.0	0.00	1	700
Orange Lake	12706	DEP SJN	Alachua	sj	F	129.1	18,395.46	250	27500
Orange Lake	12706	DEP SJN	Alachua	sj	Frogsbit	93.3	12,337.47	250	37,500
Orange Lake	12706	DEP SJN	Alachua	sj	H	12.0	5,873.00	300	210,000
Orange Lake	12706	DEP SJN	Alachua	sj	Pennywort	0.0	0.00	50	7,500
Orange Lake	12706	DEP SJN	Alachua	sj	Taro	0.0	0.00	20	4000
Orange Lake	12706	DEP SJN	Alachua	sj	Tussock	281.0	24,549.59	50	80,000
Orange, Lake	12706	A&L	Alachua	SJ	Tussocks	897.0	789,500.00		
Osborne, Lake	356	Palm Beach	Palm Beach	sf	Alligatorweed	0.0	0.00	1	682.5
Osborne, Lake	356	Palm Beach	Palm Beach	sf	F	15.0	3,784.58	25	5812
Osborne, Lake	356	Palm Beach	Palm Beach	sf	H	254.4	367,671.23	250	274606
Osborne, Lake	356	Palm Beach	Palm Beach	sf	Taro	0.0	0.00	0.5	341.25
Osborne, Lake	356	Palm Beach	Palm Beach	sf	Torpedograss	0.0	0.00	0.5	341.25
Palatlakaha River	760	DEP SJS	Lake	sj	cattails	1.5	286.52	5	1000
Palatlakaha River	760	DEP SJS	Lake	sj	S. cubensis	33.0	4,516.65	200	40000
Palatlakaha River	760	DEP SJS	Lake	sj	Taro	17.5	2,317.85	50	10000
Palatlakaha River-N	10	Lake	Lake	sj	Alligatorweed	0.0	0.00	3	384
Palatlakaha River-N	10	Lake	Lake	sj	F	0.0	0.00	6	768
Palatlakaha River-N	10	Lake	Lake	sj	H	0.0	0.00	1	40
Palatlakaha River-N	10	Lake	Lake	sj	Pennywort	0.0	0.00	5	640
Palatlakaha River-S	750	Lake	Lake	sj	F	8.5	1,055.07	12	1536
Palatlakaha River-S	750	Lake	Lake	sj	H	0.0	0.00	1	40
Palatlakaha, Lake	101	Lake	Lake	sj	F	2.2	406.61	6	768
Palatlakaha, Lake	101	Lake	Lake	sj	Paragrass	0.0	0.00	2	256
Palatlakaha, Lake	101	Lake	Lake	sj	Pennywort	0.0	0.00	0.5	64
Palatlakaha, Lake	101	Lake	Lake	sj	S. cubensis	0.0	0.00	1	128
Palatlakaha, Lake	101	Lake	Lake	sj	Torpedograss	0.0	0.00	1	128
Palestine Lake	911	DEP SR	Union	sr	F	0.0	0.00	1	100
Palestine Lake	911	DEP SR	Union	sr	Torpedograss	0.1	173.35		
Panasoffkee, Lake	4460	A&L	Sumter	SW	Tussocks	1889.1	1,206,700.00		
Panasoffkee, Lake	4460	SWFWMD	Sumter	SW	F	89.4	11,588.00	150	25,000
Panasoffkee, Lake	4460	SWFWMD	Sumter	SW	H	243.0	119,744.31	400	200,000
Panasoffkee, Lake	4460	SWFWMD	Sumter	SW	Pennywort	17.8	2,102.33	30	6,000
Panasoffkee, Lake	4460	SWFWMD	Sumter	SW	S. cubensis	0.0	0.00	5	1,000
Panasoffkee, Lake	4460	SWFWMD	Sumter	SW	Smartweed	0.0	0.00	5	1,000
Panasoffkee, Lake	4460	SWFWMD	Sumter	SW	Tussocks	12.0	1,597.68	20	4,000
Panasoffkee, Lake	4460	SWFWMD	Sumter	SW				5	1,000
Panasoffkee, Lake	4460	Texas	Sumter	SW	Tussocks	183.0	122,750.00		
Panasoffkee, Lake	4460	Weedbusters	Sumter	SW	Tussocks	61.4	97,069.50		
Pansy,Lake	50	Polk	pok	SW	F	0.0	0.00	2	300
Pansy,Lake	50	Polk	pok	SW	H	1.0	456.10	5	3500
Parker, Lake	2272	Polk	pok	SW	F	87.0	12,506.55	75	11250
Parker, Lake	2272	Polk	pok	SW	H	5.0	294.31	400	280000
Peace River	150	SWFWMD	Hardee	SW	F	20.0	3,641.81	50	10,000
Peace River	150	SWFWMD	Hardee	SW	Wetland Nigh	4.0	1,659.98	60	10,000
Peace River	150	SWFWMD	Hardee	SW	Hymenachne	0.0	0.00	5	1,000
Peacock Lake	148	DEP SR	Suwannee	sr	F	61.3	6,004.49	50	5,000
Peacock Lake	148	DEP SR	Suwannee	sr	H	0.0	0.00		
Peacock Lake	148	DEP SR	Suwannee	sr	Taro	0.0	0.00	1	200
Peacock Lake	148	DEP SR	Suwannee	sr	Torpedograss	0.0	0.00	1.5	300
Pierce, Lake	3729	A&L	Polk	SF	Tussocks	1036.0	70,960.00		
Pierce, Lake	3729	Polk	pok	SF	F	80.0	12,521.98	100	15000
Pierce, Lake	3729	Polk	pok	SF	H	0.0	0.00	20	14000
Pierce, Lake	3729	Texas	Polk	SF	Tussocks	1227.5	1,186,975.00		
Pierce, Lake	3729	Weedbusters	Polk	SF	Tussocks	10.9	90,235.90		
Pine Lake	35	Palm Beach	Palm Beach	sf	F	3.5	1,060.44	5	1056

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Pine Lake	35	Palm Beach	Palm Beach	sf	H	12.5	14,789.62	20	26374
Pine Lake	35	Palm Beach	Palm Beach	sf	Spatterdock	0.0	0.00		
Piney Z		DEP NW	Leon	nw	F	15.0	3,633.23		
Pioneer Lake	93	Highlands	Highlands	SW	cattails	0.0	0.00	0.5	43
Pioneer Lake	93	Highlands	Highlands	SW	H	0.0	0.00	1	700
Placid, Lake	3320	Highlands	Highlands	SW	cattails	0.0	0.00	0.5	43
Placid, Lake	3320	Highlands	Highlands	SW	F	0.5	387.66	2	190
Pluckebaum	25	Brevard	Brevard	sj	F	13.3	841.95	20	2000
Pluckebaum	25	Brevard	Brevard	sj	Bpeppers	0.0	0.00	1	120
Plummer Creek		DEP SJN	Nassau	sj	Pennywort	3.0	295.73		
Pocket Lake	126	Orange	Orange	SF	F	0.0	0.00	1	86.3
Pocket Lake	126	Orange	Orange	SF	H	0.0	0.00	5	6997.75
Poinsett, Lake	4334	DEP SJS	Brevard	sj	F	567.1	50,995.20	450	65250
Poinsett, Lake	4334	DEP SJS	Brevard	sj	H	0.0	0.00	250	36250
Poinsett, Lake	4334	DEP SJS	Brevard	sj	Paragrass	0.0	0.00	20	3000
Poinsett, Lake	4334	DEP SJS	Brevard	sj	Torpedogras	0.0	0.00	15	2200
Port St John Canal	7	Brevard	Brevard	sj	F	0.0	0.00	1	100
Rachel, Lake	103	DEP SR	Madison	sr	F	0.0	0.00	3	300
Rainbow River	150	SWFWMD	Marion	SW	F	20.0	2,766.88	20	4,500
Rainbow River	150	SWFWMD	Marion	SW	H	38.0	48,452.98	60	80,000
Red Beach, Lake	335	Highlands	Highlands	SW	F	0.5	129.98	2	190
Red Beach, Lake	335	Highlands	Highlands	SW	Torpedogras	0.0	0.00	1	85
Reedy Creek	100	SFWMD	Osceola	SF	F	0.0	0.00	10	1400
Reedy Creek	100	Texas	Osceola	SF	Tussocks	4.5	7,006.21		
Reedy, Lake	3486	Polk	polk	SW	F	0.0	0.00	2	300
Reedy, Lake	3486	Polk	polk	SW	H	0.0	0.00	1	700
Reedy, Lake	3486	Polk	polk	SW	tussock	30.5	321,100.00		
Rochelle, Lake	578	Polk	polk	SW	F	2.3	603.39	15	2250
Rochelle, Lake	578	Polk	polk	SW	H	137.0	70,528.99	250	175000
Rodman Res.	9600	DEP SJN	Putnam	sj	F	79.4	9,094.11	500	72,500
Rodman Res.	9600	DEP SJN	Putnam	sj	H	0.0	0.00	35	5,100
Rosalie, Lake	4597	Polk	polk	SF	F	186.0	31,934.09	250	37500
Rosalie, Lake	4597	Polk	polk	SF	H	0.0	0.00	100	70000
Rousseau Lake	4000	Citrus	Citrus	sw	H	3.0	354.78		
Rousseau, Lake	4000	DEP SW	Citrus	sw	cattails	0.0	0.00	1	400
Rousseau, Lake	4000	DEP SW	Citrus	sw	Coontail	0.0	0.00	10	7000
Rousseau, Lake	4000	DEP SW	Citrus	sw	F	925.9	77,393.98	1010	126000
Rousseau, Lake	4000	DEP SW	Citrus	sw	H	1587.0	20,676.00	800	560000
Rousseau, Lake	4000	DEP SW	Citrus	sw	S.Naiad	0.0	0.00	10	7500
Rousseau, Lake	4000	DEP SW	Citrus	sw	Tussock	17.0	3,491.50	40	8000
Rowell Lake	364	DEP SR	Bradford	sr	F	12.5	373.75	20	2000
Rowell Lake	364	DEP SR	Bradford	sr	H	0.0	0.00	80	5,000
Rowell Lake	364	DEP SR	Bradford	sr	Taro	1.1	460.66	2	400
Rowell Lake	364	DEP SR	Bradford	sr	Torpedogras	0.0	0.00	1	200
Roy, Lake	78	Polk	polk	SW	F	0.0	0.00	2	300
Roy, Lake	78	Polk	polk	SW	H	26.0	11,107.44	40	28000
Runnymede Lake	300	SFWMD	Osceola	SF	cattails	3.0	5,250.00	2	300
Runnymede Lake	300	SFWMD	Osceola	SF	Coontail	0.0	0.00	25	17500
Runnymede Lake	300	SFWMD	Osceola	SF	F	77.0	10,905.96	100	14000
Runnymede Lake	300	SFWMD	Osceola	SF	H	0.0	0.00	25	17500
Runnymede Lake	300	SFWMD	Osceola	SF	nuphar	26.0	1,039.14	10	1700
Runnymede Lake	300	SFWMD	Osceola	SF	Paragrass	0.0	0.00	2	300
Runnymede Lake	300	SFWMD	Osceola	SF	tussocks	0.0	0.00	80	350,000
Runnymede Lake	300	Weedbusters	Osceola	SF	Tussocks	47.8	372,091.70		
Russell, Lake	300	SFWMD	Osceola	SF	F	4.0	1,340.98	15	2100
Ruth Lake	312	Brevard	Brevard	sj	cattails	0.0	0.00	1	218
Ruth Lake	312	Brevard	Brevard	sj	F	54.0	1,883.93	20	3800
Saddle Creek Park	335	Polk	polk	SW	F	30.3	5,458.59	50	7500
Saddle Creek Park	335	Polk	polk	SW	H	59.8	16,621.90	120	84000
Salt Lake	336	Brevard	Brevard	sj	cattails	0.0	0.00	1	160

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Salt Lake	336	Brevard	Brevard	sj	F	2.0	0.00	5	950
Sampson Lake	2042	DEP SR	Bradford	sr	cattails	12.0	1,320.96	30	6,000
Sampson Lake	2042	DEP SR	Bradford	sr	F	51.3	2,574.64	40	4000
Sampson Lake	2042	DEP SR	Bradford	sr	H	0.0	0.00	10	6,500
Sampson Lake	2042	DEP SR	Bradford	sr	Taro	0.0	0.00	2	400
Sampson Lake	2042	DEP SR	Bradford	sr	Torpedogras	0.0	0.00	8	1600
Sanitary(Mariana)	500	Polk	polk	SW	F	0.0	0.00	2	300
Santa Fe Lake	4721	DEP SR	Alachua	sr	F	80.3	5,807.78	90	9,000
Santa Fe Lake	4721	DEP SR	Alachua	sr	Taro	0.0	0.00	0.5	100
Santa Fe Lake	4721	DEP SR	Alachua	sr	Torpedogras	6.5	788.63	10	2,000
Santa Fe River	5000	DEP SR	Columbia	sr	Alligatorweed	0.0	0.00	1	200
Santa Fe River	5000	DEP SR	Columbia	sr	F	0.5	219.57	35	4375
Santa Fe River	5000	DEP SR	Columbia	sr	H	0.0	0.00		
Santa Fe River	5000	DEP SR	Columbia	sr	Taro	0.0	0.00	0.1	20
Santa Fe River	5000	DEP SR	Columbia	sr	Torpedogras	0.0	0.00	0.5	100
Savannahs St Park	2700	SFWMD	Martin	SF	F	74.0	6,827.05	20	2800
Savannahs St Park	2700	SFWMD	Martin	SF	H	0.0	0.00	1	700
Sawgrass, Lake	407	SJRWMD	Brevard	sj	F	154.0	16,696.62	75	12000
Sawgrass, Lake	407	SJRWMD	Brevard	sj	Frogsbit	2.0	454.70	5	800
Sawgrass, Lake	407	SJRWMD	Brevard	sj	H	780.0	11,486.74	25	16250
Sawgrass, Litle Lake	74	SJRWMD	Brevard	sj	F	32.0	4,077.96	10	1600
Sawgrass, Litle Lake	74	SJRWMD	Brevard	sj	Frogsbit	0.0	0.00	15	2400
Sawgrass, Litle Lake	74	SJRWMD	Brevard	sj	H	60.0	822.78	5	3450
Sears,Lake	82	Polk	polk	SW	F	0.0	0.00	2	300
Sears,Lake	82	Polk	polk	SW	H	1.0	340.83	5	3500
Sebring, Lake	468	Highlands	Highlands	SW	F	1.0	136.25	6	570
Sebring, Lake	468	Highlands	Highlands	SW	S. cubensis	0.0	0.00	1	95
Sebring, Lake	468	Highlands	Highlands	SW	snag trees	0.0	0.00		1,000
Sellers Lake (Pond)	1050	Lake	Lake	sj	F	0.0	0.00	0.5	64
Sellers Lake (Pond)	1050	Lake	Lake	sj	H	0.0	0.00	0.5	20
Sellers Lake (Pond)	1050	Lake	Lake	sj	Torpedogras	0.0	0.00	1	128
Sheen, Lake	565	Orange	Orange	SF	F	0.0	0.00	4	345.2
Sheen, Lake	565	Orange	Orange	SF	H	566.8	2,545.09	30	41986.5
Shell Creek	48	SWFWMD	Charlotte	SW	F	138.0	23,216.02	110	24,000
Shingle Creek	10	SFWMD	Osceola	SF	F	0.0	0.00	10	1400
Shingle Creek	10	SFWMD	Osceola	SF	H	0.0	0.00	2	1400
Shipp, Lake	283	Polk	polk	SW	F	0.3	174.73	2	300
Shipp, Lake	283	Polk	polk	SW	H	31.0	10,475.84	75	52500
Silver Lake	120	SWFWMD	Hernando	SW	H	0.0	0.00	20	15,000
Silver River (Run)	40	DEP SJN	Marion	sj	duckweed	0.0	0.00	3	600
Silver River (Run)	40	DEP SJN	Marion	sj	F	0.0	0.00	1	200
Silver River (Run)	40	DEP SJN	Marion	sj	H	1.5	1,609.02	2	2000
Silver, Lake	52	Polk	polk	SW	F	0.0	0.00	2	300
Silver, Lake	52	Polk	polk	SW	H	16.9	373.14	10	7000
SJR Deleon Springs		DEP SJS	Volusia	sj	F	75.0	6,713.78	1200	175000
SJR Deleon Springs		DEP SJS	Volusia	sj	H	0.0	0.00	15	2200
SJR Deleon Springs		DEP SJS	Volusia	sj	Bpeppers	0.0	0.00	25	3250
SJR Deleon Springs		DEP SJS	Volusia	sj	tallow	0.0	0.00	25	3250
SJR, 520 Canal	12	Brevard	Brevard	sj	F	4.0	0.00	5	450
SJR, 520 Canal	12	Brevard	Brevard	sj	Bpeppers	0.0	0.00	1	120
SJR, Tucker canal	26	Brevard	Brevard	sj	F	40.0	2,870.36	5	600
SJR, Tucker canal	26	Brevard	Brevard	sj	Bpeppers	0.0	0.00	1	140
Smart Lake	275	Polk	polk	SW	F	0.0	0.00	2	300
Smart Lake	275	Polk	polk	SW	H	80.0	29,905.09	100	70000
Smith		A&L	Washington	NW	Tussocks	75.0	58,500.00		
Smith Lake		DEP NW	Washington	nw	Brasenia	0.0	0.00	20	8000
Smith Lake		DEP NW	Washington	nw	Torpedogras	0.0	0.00	20	4000
Sneads Smk	110	DEP NW	Jefferson	nw	F	79.5	8,222.50	40	4000
Sneads Smk	110	DEP NW	Jefferson	nw	Frogsbit	0.0	0.00	40	6000
Sneads Smk	110	DEP NW	Jefferson	nw	H	0.0	0.00	1	

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Sneads Smokehouse	110	A&L	Jefferson	NW	Tussocks	6.8	8,500.00		
Sneads, Lake		DEP SJN		sj	F	30.5	3,486.90		
South Lake	1101	Brevard	Brevard	sj	cattails	36.0	4,095.34	30	2730
South Lake	1101	Brevard	Brevard	sj	F	67.0	6,863.02	50	8250
South Lake	1101	Brevard	Brevard	sj	H	0.0	0.00	1	365
South Lake Talmadge	60	Volusia	Volusia	sj	F	6.9	670.88	8	1440
South Lake Talmadge	60	Volusia	Volusia	sj	H	0.0	0.00	2	1400
South Lake Talmadge	60	Volusia	Volusia	sj	S. cubensis	0.0	0.00	3	480
South Lake Talmadge	60	Volusia	Volusia	sj	snag trees	0.0	0.00		1500
Spring, Lake	25	Polk	polk	SW	F	0.3	100.26	2	300
Spring, Lake	25	Polk	polk	SW	H	10.8	4,524.42	20	14000
St. Johns River		ACOE	St. Johns	SJ	F	5560.0	537,429.60		
St. Johns River		Brevard	Brevard	sj	F	571.0	55,889.81	500	47500
St. Johns River		DEP SJS	St. Johns	sj	F	1438.9	167,689.41		
St. Johns River		SJRWMD	St. Johns	sj	F	209.0	84,088.37	100	16000
St. Johns River		SJRWMD	St. Johns	sj	Frogsbit	2.0	454.70	2	320
St. Johns River		SJRWMD	St. Johns	sj	H	0.0	0.00	25	16250
St. John's River		Volusia	Volusia	sj	F	505.6	49,791.36	500	50000
St.Johns Creeks		DEP SJS	St. Johns	sj	Tussock	0.0	0.00	130	73000
Stearns Creek	45	Highlands	Highlands	SW	F	0.0	0.00	1	95
Stearns Creek	45	Highlands	Highlands	SW	snag trees	0.0	0.00		1,000
Stearns Creek	45	Highlands	Highlands	SW	Taro	0.0	0.00	1	95
Stella, Lake*	308	DEP SJN	Putnam	sj	F	2.0	195.42	4.5	463
Stella, Lake*	308	DEP SJN	Putnam	sj	H	0.3	217.20		
Stella, Lake*	308	DEP SJN	Putnam	sj	Taro	0.0	0.00	1	200
Stella, Lake*	308	DEP SJN	Putnam	sj	Torpedogras	0.0	0.00	0.5	100
Summit, Lake	67	Polk	polk	SW	F	2.3	437.83	2	300
Summit, Lake	67	Polk	polk	SW	H	31.3	9,899.63	35	24500
Surveyors, Lake	293	Polk	polk	SW	F	1.0	516.58	10	1500
Susan, Lake	81	Lake	Lake	sj	F	2.0	396.17	6	768
Susan, Lake	81	Lake	Lake	sj	Paragrass	0.0	0.00	0.25	32
Suwannee Lake	63	DEP SR	Suwannee	sr	F	9.0	2,060.54	5	500
Suwannee River	12000	DEP SR	Dixie	sr	F	152.0	23,828.37	150	18750
Suwannee River	12000	DEP SR	Dixie	sr	H	0.0	0.00	5	3,250
Suwannee River	12000	DEP SR	Dixie	sr	Pennywort	0.0	0.00	5	1000
Suwannee River	12000	DEP SR	Dixie	sr	Taro	13.0	6,040.97	5	1,000
Suwannee River	12000	DEP SR	Dixie	sr	Torpedogras	0.0	0.00	2.5	500
Swift Creek	568	DEP SR	Union	sr	Torpedogras	0.0	0.00	0.1	20
Swoope Lake	88	Polk	polk	SW	F	0.0	0.00	2	300
Swoope Lake	88	Polk	polk	SW	H	0.0	0.00	50	35000
Talquin, Lake	8850	DEP NW	Gadsden	nw	F	171.0	16,871.04	100	12500
Talquin, Lake	8850	DEP NW	Gadsden	nw	S. cubensis	0.0	0.00	50	7500
Tarpon, Lake	2534	SWFWMD	Pinellas	SW	Coontail	0.0	0.00	20	12,000
Tarpon, Lake	2534	SWFWMD	Pinellas	SW	F	73.9	13,058.00	100	20,000
Tarpon, Lake	2534	SWFWMD	Pinellas	SW	H	232.5	117,749.87	150	125,000
Tarpon, Lake	2534	SWFWMD	Pinellas	SW	Tussocks	0.5	4,515.82	2	5,000
Tennessee, Lake	112	Polk	polk	SW	F	0.0	0.00	2	300
Tenoroc Pits	1200	Polk	polk	SW	F	94.0	12,477.34	150	22500
Tenoroc Pits	1200	Polk	polk	SW	H	14.4	442.16	75	52500
Thomas Creek		DEP SJN	Nassau	sj	Pennywort	3.0	338.78		
Thomas, Lake	73	Polk	polk	SW	F	0.0	0.00	2	300
Thonotosassa, Lk	819	Hillsborough	Hillsborough	sw	cattails	0.0	0.00	5	893.35
Thonotosassa, Lk	819	Hillsborough	Hillsborough	sw	F	8.0	2,780.03	23	5300.12
Thonotosassa, Lk	819	Hillsborough	Hillsborough	sw	H	0.0	0.00	2	1552.4
Thonotosassa, Lk	819	SWFWMD	Hillsborough	SW	Alligatorweed	0.0	0.00	10	0
Thonotosassa, Lk	819	SWFWMD	Hillsborough	SW	F	44.0	5,029.69	50	7,500
Thonotosassa, Lk	819	SWFWMD	Hillsborough	SW	Parrotsfthr	0.0	0.00	5	0
Thonotosassa, Lk	819	SWFWMD	Hillsborough	SW	Primrose	0.0	0.00	10	0
Thonotosassa, Lk	819	SWFWMD	Hillsborough	SW	S. cubensis	0.0	0.00	15	0
Tibet, Lake	1198	Orange	Orange	SF	F	0.0	0.00	10	863

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Tibet, Lake	1198	Orange	Orange	SF	H	1515.0	2,477.70	50	69978
Tiger, Lake	2200	Polk	polk	SF	F	79.0	14,851.15	250	37500
Tiger, Lake	2200	Polk	polk	SF	H	0.0	0.00	5	3500
Townsend Lake	110	DEP SR	Lafayette	sr	Taro	0.0	0.00	0.2	40
Tracy, Lake	136	Polk	polk	SW	F	6.5	1,225.19	5	750
Tracy, Lake	136	Polk	polk	SW	H	60.3	12,807.89	100	70000
Trafford, Lake	1494	SFWMD	Collier	SF	F	0.0	0.00	20	2800
Trinity Oaks		DEP SW	pasco	sw	Marsilea	2.5	1,636.45		
Triplet Chain		DEP SJS	Seminole	sj	F	0.0	0.00	30	4500
Triplet Chain		DEP SJS	Seminole	sj	H	0.0	0.00	10	8000
Trout Lake	102	Lake	Lake	sj	cattails	0.0	0.00	1	128
Trout Lake	102	Lake	Lake	sj	F	7.0	774.29	11	1408
Trout Lake	102	Lake	Lake	sj	H	0.0	0.00	3	120
Trout Lake	102	SFWMD	Osceola	SF	F	0.0	0.00	4	560
Trout Lake	102	SFWMD	Osceola	SF	H	0.0	0.00	1	700
Tsala Floral City	19111	Citrus	Citrus	sw	Alligatorweed	0.0	0.00	9	3150
Tsala Floral City	19111	Citrus	Citrus	sw	cattails	0.0	0.00	9	3150
Tsala Floral City	19111	Citrus	Citrus	sw	Coontail	0.0	0.00	96	38400
Tsala Floral City	19111	Citrus	Citrus	sw	F	51.5	12,347.20	99	32175
Tsala Floral City	19111	Citrus	Citrus	sw	Frogsbit	0.0	0.00	11	3850
Tsala Floral City	19111	Citrus	Citrus	sw	H	109.5	84,167.89	173	168675
Tsala Floral City	19111	Citrus	Citrus	sw	Maidencane	0.0	0.00	2	700
Tsala Floral City	19111	Citrus	Citrus	sw	Nuphar	0.0	0.00	15	5250
Tsala Floral City	19111	Citrus	Citrus	sw	Parrotsfthr	0.0	0.00	16	7200
Tsala Floral City	19111	Citrus	Citrus	sw	Paspalum	0.0	0.00	6	2100
Tsala Floral City	19111	Citrus	Citrus	sw	Pennywort	0.0	0.00	44	15400
Tsala Floral City	19111	Citrus	Citrus	sw	Pickrelweed	0.0	0.00	2	450
Tsala Floral City	19111	Citrus	Citrus	sw	Pondweed	0.0	0.00	3	1200
Tsala Floral City	19111	Citrus	Citrus	sw	S. Naiad	0.0	0.00	9	4050
Tsala Floral City	19111	Citrus	Citrus	sw	Smartweed	0.0	0.00	6	2100
Tsala Floral City	19111	Citrus	Citrus	sw	Torpedograss	0.0	0.00	17	5950
Tsala Floral City	19111	Citrus	Citrus	sw	Tussock	260.9	134,399.18	40	180000
Tsala Floral City	19111	Citrus	Citrus	sw	Willows	0.0	0.00	23	8050
Tsala Hernando	19111	Citrus	Citrus	sw	cattails	0.0	0.00	17	5950
Tsala Hernando	19111	Citrus	Citrus	sw	Coontail	0.0	0.00	19	7600
Tsala Hernando	19111	Citrus	Citrus	sw	F	12.0	4,740.01	59	19175
Tsala Hernando	19111	Citrus	Citrus	sw	Fanwort	0.0	0.00	57.5	25875
Tsala Hernando	19111	Citrus	Citrus	sw	FragLily	0.0	0.00	23.5	8225
Tsala Hernando	19111	Citrus	Citrus	sw	Frogsbit	0.0	0.00	2.5	875
Tsala Hernando	19111	Citrus	Citrus	sw	H	534.2	241,187.94	623	606550
Tsala Hernando	19111	Citrus	Citrus	sw	Limnophila	0.0	0.00	0.5	400
Tsala Hernando	19111	Citrus	Citrus	sw	Lotus	0.0	0.00	5	1125
Tsala Hernando	19111	Citrus	Citrus	sw	Maidencane	0.0	0.00	8.5	2975
Tsala Hernando	19111	Citrus	Citrus	sw	Nitella	0.0	0.00	31	14725
Tsala Hernando	19111	Citrus	Citrus	sw	Nuphar	0.0	0.00	49	17150
Tsala Hernando	19111	Citrus	Citrus	sw	Pennywort	0.0	0.00	2	700
Tsala Hernando	19111	Citrus	Citrus	sw	Pickrelweed	0.0	0.00	10	2250
Tsala Hernando	19111	Citrus	Citrus	sw	Pondweed	0.0	0.00	7.5	3000
Tsala Hernando	19111	Citrus	Citrus	sw	S.Milfoil	0.0	0.00	9	4050
Tsala Hernando	19111	Citrus	Citrus	sw	S.Naiad	0.0	0.00	22	9900
Tsala Hernando	19111	Citrus	Citrus	sw	Torpedograss	0.0	0.00	12.5	4375
Tsala Hernando	19111	Citrus	Citrus	sw	Tussock	409.9	1,985,252.31	229	1316571
Tsala Hernando	19111	Citrus	Citrus	sw	W.Shield	0.0	0.00	19	8550
Tsala Hernando	19111	Citrus	Citrus	sw	Willows	0.0	0.00	14	4900
Tsala Inverness	19111	Citrus	Citrus	sw	bladderwrt	0.0	0.00	7	2450
Tsala Inverness	19111	Citrus	Citrus	sw	cattails	0.0	0.00	14.5	5075
Tsala Inverness	19111	Citrus	Citrus	sw	Coontail	0.0	0.00	36.5	14600
Tsala Inverness	19111	Citrus	Citrus	sw	F	10.5	3,196.40	87.5	28438
Tsala Inverness	19111	Citrus	Citrus	sw	Fanwort	13.1	4,652.36	86.5	38925
Tsala Inverness	19111	Citrus	Citrus	sw	Frag Lily	0.0	0.00	3	1050

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Tsala Inverness	19111	Citrus	Citrus	sw	Frogsbit	0.0	0.00	21.5	7525
Tsala Inverness	19111	Citrus	Citrus	sw	H	880.4	387,046.96	799	779025
Tsala Inverness	19111	Citrus	Citrus	sw	Limnophila	0.0	0.00	11	8800
Tsala Inverness	19111	Citrus	Citrus	sw	lotus	0.0	0.00	2	450
Tsala Inverness	19111	Citrus	Citrus	sw	Maidencane	0.0	0.00	2.5	875
Tsala Inverness	19111	Citrus	Citrus	sw	Nuphar	0.0	0.00	62	21700
Tsala Inverness	19111	Citrus	Citrus	sw	Parrotsfthr	0.0	0.00	7	3150
Tsala Inverness	19111	Citrus	Citrus	sw	Pennywort	0.0	0.00	6	2100
Tsala Inverness	19111	Citrus	Citrus	sw	Pickrelweed	0.0	0.00	11	2475
Tsala Inverness	19111	Citrus	Citrus	sw	Pondweed	0.0	0.00	15	6000
Tsala Inverness	19111	Citrus	Citrus	sw	S. Milfoil	0.0	0.00	2	900
Tsala Inverness	19111	Citrus	Citrus	sw	S. Naiad	0.0	0.00	30	13500
Tsala Inverness	19111	Citrus	Citrus	sw	sawgrass	0.0	0.00	2	540
Tsala Inverness	19111	Citrus	Citrus	sw	Smartweed	0.0	0.00	2	700
Tsala Inverness	19111	Citrus	Citrus	sw	Torpedogras	0.0	0.00	13.5	4725
Tsala Inverness	19111	Citrus	Citrus	sw	Tussock	342.8	255,399.29	57.5	258750
Tsala Inverness	19111	Citrus	Citrus	sw	Willows	0.0	0.00	16	5600
Tulane, Lake	89	Highlands	Highlands	SW	H	0.0	0.00	1	700
Turtle Mound Canal	27	Brevard	Brevard	sj	F	8.0	0.00	5	1000
Umatilla, Lake	162	Lake	Lake	sj	F	0.0	0.00	0.5	64
Upper Myakka Lake	1020	SWFWMD	Sarasota	SW	F	16.6	0.00	110	19250
Upper Myakka Lake	1020	SWFWMD	Sarasota	SW	Frogsbit	0.0	0.00	5	1000
Upper Myakka Lake	1020	SWFWMD	Sarasota	SW	H	0.0	0.00	5	5000
Upper Myakka Lake	1020	SWFWMD	Sarasota	SW	hymenachne	0.0	0.00	2.5	1000
Upper Myakka Lake	1020	SWFWMD	Sarasota	SW	Paragrass	0.0	0.00	2.5	1000
Upper Myakka Lake	1020	SWFWMD	Sarasota	SW	Tussocks	0.0	0.00	5	3000
Upper Taylor Crk	35	SFWMD	Okeechobee	SF	F	153.0	6,859.83	200	28000
Upper Taylor Crk	35	SFWMD	Okeechobee	SF	hymenachne	0.0	0.00	2	340
Upper Taylor Crk	35	SFWMD	Okeechobee	SF	Pennywort	0.0	0.00	10	1500
Viola, Lake	73	Highlands	Highlands	SW	H	1.0	712.86	1	700
Wacissa River	250	DEP NW	Jefferson	nw	F	82.5	11,026.07	100	12500
Wacissa River	250	DEP NW	Jefferson	nw	H	0.0	0.00	10	10000
Wakulla River	300	DEP NW	Wakulla	nw	H	75.0	64,500.00	75	75000
Wales, Lake	326	Polk	polk	SW	F	1.5	184.01	2	300
Wales, Lake	326	Polk	polk	SW	H	0.0	0.00	1	700
Washington, Lake	4362	SJRWMD	Brevard	sj	F	28.5	3,783.91	100	16000
Washington, Lake	4362	SJRWMD	Brevard	sj	H	0.0	0.00	75	48750
Washington, Lake	4362	SJRWMD	Brevard	sj	Taro	2.5	874.68	50	8000
Watermellon Pond	531	DEP SR	Alachua	sr	F	0.0	0.00	1	100
Watermellon Pond	531	DEP SR	Alachua	sr	H	0.0	0.00	0.3	195
Watertown Lake	46	DEP SR	Columbia	sr	F	0.0	0.00	0.2	20
Watertown Lake	46	DEP SR	Columbia	sr	H	0.2	243.79	0.2	130
Watertown Lake	46	DEP SR	Columbia	sr	Taro	0.5	412.29	0.1	20
Watertown Lake	46	DEP SR	Columbia	sr	Torpedogras	0.0	0.00	0.1	20
Wauberg Lake		DEP SJN	Alachua	sj	F	0.0	0.00	1	100
Wauberg Lake		DEP SJN	Alachua	sj	Torpedogras	0.0	0.00	0.5	100
Wauseon Bay	138	Orange	Orange	SF	F	0.0	0.00	1	86.3
Wauseon Bay	138	Orange	Orange	SF	H	2.9	1,621.47	10	13995.5
Weeki Wachee River	150	SWFWMD	Hernando	SW	Cattails	0.0	0.00	1	250
Weeki Wachee River	150	SWFWMD	Hernando	SW	F	2.2	810.67	5	750
Weeki Wachee River	150	SWFWMD	Hernando	SW	H	32.0	27,404.31	70	65000
Weeks, Lake	55	Hillsborough	Hillsborough	sw	cattails	0.0	0.00	1	178.67
Weeks, Lake	55	Hillsborough	Hillsborough	sw	F	1.8	527.72	5	1152.2
Weir, Lake*	5685	DEP SJN	Marion	sj	cattails	0.0	0.00	1	200
Weir, Lake*	5685	DEP SJN	Marion	sj	F	0.0	0.00	20	2000
Weir, Lake*	5685	DEP SJN	Marion	sj	H	7.0	6,616.53	20	22000
Wekiva River	234	DEP SJS	Orange	sj	cattails	0.0	0.00	35	5075
Wekiva River	234	DEP SJS	Orange	sj	F	61.5	11,583.06	150	21750
Wekiva River	234	DEP SJS	Orange	sj	H	0.0	0.00	10	8500
Wekiva River	234	DEP SJS	Orange	sj	Paragrass	0.0	0.00	15	2175

Water Body	Water Acres	Contractor	County	WMD	Plant Type	FY 05-06 Acres Treated	FY 05-06 Dollars Spent	FY 06-07 Acres Ctrl Allocated	FY 06-07 Dollars Allocated
Wekiva River	234	DEP SJS	Orange	sj	snag trees				30000
Wekiva River	234	DEP SJS	Orange	sj	Taro	0.0	0.00	15	2175
Wekiva River	234	DEP SJS	Orange	sj	Torpedogras	0.0	0.00	1	145
Weohyakapka, Lake	7532	Polk	polk	SF	F	125.5	15,710.80	50	7500
Weohyakapka, Lake	7532	Polk	polk	SF	H	0.0	0.00	500	350000
Weohyakapka, Lake	7532	Polk	polk	SF	tussock	2.0	40,875.00		
West Lk Toho.	18810	SFWMD	Osceola	SF	F	411.0	49,127.65	1500	210000
West Lk Toho.	18810	SFWMD	Osceola	SF	Frogsbit	0.0	0.00	50	7500
West Lk Toho.	18810	SFWMD	Osceola	SF	H	954.0	27,708.01	1000	760000
West Lk Toho.	18810	SFWMD	Osceola	SF	Tussock	0.0	0.00	5	5000
White Heron Canal		Brevard	Brevard	sj	F	0.0	0.00	8	800
Wickham Rd, Canal	27	Brevard	Brevard	sj	F	10.0	1,060.79	8	1600
Wildcat Lake	232	Lake	Lake	sj	F	0.0	0.00	0.5	64
Wildcat Lake	232	Lake	Lake	sj	H	0.0	0.00	0.5	20
Wilson, Lake	32	Lake	Lake	sj	F	0.0	0.00	6	768
Wilson, Lake	32	Lake	Lake	sj	H	0.0	0.00	0.5	20
Wilson, Lake	32	Lake	Lake	sj	S. cubensis	0.0	0.00	2	256
Winder Rd. Canal	26	Brevard	Brevard	sj	F	10.0	1,060.79	8	1600
Winder, Lake	1496	DEP SJS	Brevard	sj	F	263.0	24,443.43	350	51000
Winder, Lake	1496	DEP SJS	Brevard	sj	H	0.0	0.00	120	17400
Winder, Lake	1496	DEP SJS	Brevard	sj	Taro	0.0	0.00	15	2200
Winder, Lake	1496	DEP SJS	Brevard	sj	Torpedogras	0.0	0.00	10	1500
Winona, Lake	75	Lake	Lake	sj	F	0.3	135.38	11	1,408
Winona, Lake	75	Lake	Lake	sj	H	0.6	203.84	0.5	20
Winona, Lake	75	Lake	Lake	sj	Primrose	0.0	0.00	2	256
Winterset, Lake	548	Polk	polk	SW	F	0.0	0.00	2	300
Winterset, Lake	548	Polk	polk	SW	H	78.7	34,468.28	125	87500
Withlacoochee River	3600	SWFWMD	Citrus	SW	Coontail	0.0	0.00	5	2000
Withlacoochee River	3600	SWFWMD	Citrus	SW	F	960.0	101,286.71	600	100000
Withlacoochee River	3600	SWFWMD	Citrus	SW	H	57.6	37,716.54	500	120000
Withlacoochee River	3600	SWFWMD	Citrus	SW	Pennywort	0.0	0.00	15	3000
Withlacoochee River	3600	SWFWMD	Citrus	SW	S. cubensis	62.4	12,285.25	10	2000
Withlacoochee River	3600	SWFWMD	Citrus	SW	Smartweed	0.0	0.00	10	2000
Withlacoochee River	3600	SWFWMD	Citrus	SW	Taro	0.0	0.00	25	5000
Withlacoochee River	3600	SWFWMD	Citrus	SW	Hymenachne	0.0	0.00	5	1000
Withlacoohee	647	DEP SR	Hamilton	sr	F	0.0	0.00	0.5	50
Wood Lake	150	Polk	polk	SW	F	15.0	2,474.96	25	3750
Wood Lake	150	Polk	polk	SW	H	14.3	384.34	15	10500
Yale, Lake	4042	Lake	Lake	sj	cattails	0.0	0.00	1	128
Yale, Lake	4042	Lake	Lake	sj	F	6.8	827.38	14	1,792
Yale, Lake	4042	Lake	Lake	sj	H	2.7	258.86	8	320
Yale, Lake	4042	Lake	Lake	sj	Torpedogras	0.0	0.00	1	128